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An Assessment of the Basic Needs of Rural Labour in the Hill Region of Uttar Pradesh

By

G. P. MISHRA & P. D. SHRIMALI

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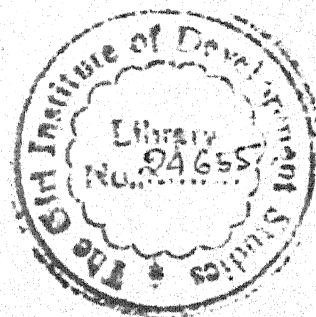
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PREFACE

This study on 'Assessing the Minimum Needs of Rural Labour' was undertaken as a part of a project sponsored by the National Commission on Rural Labour entrusted to Joshi-Adhikari Institute of Social Studies, New Delhi. The Institute asked the authors of this Report to undertake this study on their behalf through a sample survey of the Hill Region of Uttar Pradesh with a view to highlight the key problems of the rural labour in this region and suggest appropriate policy measures to ameliorate their lot.

We are grateful to Dr. B.K. Joshi, Director of the Giri Institute of Development Studies, Lucknow for permitting us to use the facilities available at the Institute for the accomplishment of this task.

We also wish to place on record our acknowledgement and thanks to all those academics who assisted us in carrying out this work. We thank Smt. Meena Kala, Lecturer in Economics at Nari Shiksha Niketan Degree College, Lucknow, who is undertaking a doctoral study on the 'Development of the Hill Region of Uttar Pradesh during the Plan Period', for compiling and making available to us the secondary data relevant to our study. We also wish to place on record our thanks to Dr. Fahimuddin and Mr. B.K. Bajpai, Research Assistants at the Giri

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We also owe our thanks to Mr. A.P. Pandey, a member of the Institute, for lending his valuable contributions in completing this work. We, however, feel sorry for its delayed completion due to unavoidable circumstances.

Lucknow:
December 6, 1990

G.P. MISHRA
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CHAPTER I

SCOPE, OBJECTIVES AND METHOD OF STUDY

This study is a part of a project sponsored by the National Commission of Rural Labour with the aim of 'assessing the minimum needs of rural labour' entrusted to Joshi-Adhikari Institute of Social Studies, New Delhi. The Institute, in its turn, called upon the authors of this study, the members of Uttar Pradesh chapter of the Institute to undertake it for the Hill region of Uttar Pradesh. The present study is, therefore, confined to the Hill region consisting of the eight districts, viz. Uttar Kashi, Chamoli, Tehri Garhwal, Dehradun and Garhwal in the Garhwal Division and Pithoragarh, Almora and Nainital in the Kumaon Division.

The limitation of time and resources available for carrying out this study, enjoined us to confine it to, besides analysis of the available secondary data, a field survey and analysis of primary data collected from a limited, but, representative sample. One district each from the two divisions was, therefore, to be selected for the purposes of the study. It was, further, felt necessary to limit the study to three villages each from the two districts and fifty households each from the selected six villages.

The focus of the study being the study of the rural labour, the selection of the districts was done on the basis

of the percentage proportion of rural labour to total main workers in the district concerned and the percentage proportion of rural labour in the district to the total rural labour in the Hill region. One district with highest percentage and the other with medium percentage was selected as is indicated in the following table.

Table 1 : Rural Labour Force as Per Cent of Main Workers in Hill Region-District-wise Distribution

District	Rural Labour	Total Main Workers	Percentage of Rural Labour in Total Main Workers	Percentage of Rural Labour in Hill Region
1. Uttar Kashi	81,253	94,392	86.08	6.59
2. Chamoli	133,529	151,010	88.42	10.82
3. Tehri Garhwal	192,147	214,441	89.60	15.57
4. Dehradun	91,095	132,989	68.50	7.38
5. Garhwal	171,911	210,999	81.47	13.93
Total Garhwal Division	669,935	803,381	83.34	54.30
6. Pithoragarh	151,994	178,527	85.14	12.32
7. Almora	183,594	221,437	82.91	14.88
8. Nainital	228,346	271,867	83.99	18.51
Total Kumaon Division	563,834	671,831	83.92	45.70
Total Hill Region	1233,769	1475,662	83.61	100.00

With this criteria in consideration, Tehri Garhwal district from the Garhwal Division and Almora district from the Kumaon Division were selected.

Three villages from each district, viz., Malgaon, Falseema and Deoli from Almora district and Majud, Bada Sweeta and Arkot from Tehri Garhwal district were selected as sample villages for the purposes of depth study. The selection of villages was made on the basis of a perusal of the data available for the villages in the District Census Handbooks and Village Directories. The selection was made to ensure that villages with varying levels of development are in the sample; the nearness or distance from the main road and availability or otherwise, of infrastructural facilities were used as guiding factors for such selection. Keeping in mind the time and resource constraints, the accessibility to the village, as well as, the adequacy of the size of the village so as to make possible the selection of fifty households from the village for the sample.

The survey was conducted with the help of two schedules -(i) a village schedule, and (ii) a household schedule, the copies of which are appended at the end of the Report on this study. The village schedule was used to collect the basic information relating to the village both by tapping the secondary data sources, as well as, by gathering some primary data. A listing of all households in the village was undertaken as part of this effort at gathering basic information about the village. The data, thus collected, was used to select fifty

households each from the village for intensive survey on the basis of the household schedule, having selected on the basis of stratified random sampling.

The main objective of the study being 'The Assessment of the Minimum Needs of Rural Labour', the schedules focussed on gathering information on pattern of land and other assets holding, pattern of employment, pattern of earnings and consumption, savings and indebtedness, availability of infra-structural facilities and avenues of employment in non-agricultural sector within or outside, but in the vicinity of the village and degree of developmental, as well as, poverty alleviation schemes being undertaken and their impact on the life of the people residing in the village. The study was intended, ultimately, to assess the intensity of poverty and disabilities suffered by the rural labour both quantitatively and qualitatively and indicate the possible policy measures to alleviate their lot.

Appendix

Sample Size : Villages and House-
holds in Hill Region

District/Village	Number of households	Sample Size	
		Number	Percentage of total households
<u>Almora</u>			
1. Deoli	98	50	51.02
2. Malgaon	159	50	33.45
3. Falseema	55	50	90.90
Total (1-3)	312	150	48.08
<u>Tehri Garhwal</u>			
4. Ara Kota	116	50	43.10
5. Manjud	55	50	90.90
6. Sweeta Bada	112	50	46.64
Total (4-6)	283	150	53.00
Total (1-6)	595	300	50.42

CHAPTER II

SOCIO-ECONOMIC CHARACTERISTICS OF HILL REGION

Uttar Pradesh is the fourth largest state in the country with its geographical area of 2,94,366 sq. kms, which is 9.01 per cent of the total area of the country. It is, however, the largest from the point of view of the population, it being, according to 1981 Census, 11.09 crores, which is 16.19 per cent of the country's population.

Physiographically, Uttar Pradesh consists of four distinct regions viz. (i) the mountainous area; (ii) the tarai area; (iii) the plains of Ganga and Yamuna rivers; and (iv) the trans-yamuna region including the Vindhya ranges. For the purpose of planning economic development, the State has been marked out into five regions - the Western, Central, Eastern, Bundelkhand and Hills regions.

The Hills region of Uttar Pradesh is divided into two Administrative Divisions, viz., the Kumaon Division and the Garhwal Division. It consists of eight districts, viz., Almora, Pithoragarh and Nainital falling in Kumaon Division and Chamoli, Garhwal, Tehri Garhwal, Dehradun and Uttar Kashi falling in Garhwal Division.

Population and Occupation

According to 1981 Census the area and population of the Hill region of the State is 51,125 sq.kms and about 48.38 lakhs constituting 17.4 per cent and 4.3 per cent of the state's area and population respectively. The districtwise proportion of the state's area and population in the region varied from 1.07 per cent in Dehradun to 2.90 per cent in Chamoli, and 0.17 per cent in Uttar Kashi to 0.69 per cent in Dehradun respectively.

The Hill region is sparsely populated, its density being only 95 persons per sq.km. as against the average density of 377 for the state. The district-wise density of the Hill region varies from 24 in Uttar Kashi to 247 in Dehradun. The districts of Uttar Kashi, Chamoli and Pithoragarh have the lowest density of population in the state (see Table 2).

During the period of 1971-1981, the population of the Hill region grew at a faster rate of 26.73 per cent as against the state's growth of 25.49 per cent. The district of Nainital registered the fastest growth rate of 43.85 not only in the Hill region but in the whole of the state. Almora, Pithoragarh, Garhwal and Tehri Garhwal registered population growth below the average rate of the Hill region's

population growth. The sex ratio in the region is relatively high compared to that of the State, being 958 females per 1000 males in the Hill region as against 885 for the State. The sex ratio is more than 1000 females for 1000 males in Almora, Pithoragarh, Garhwal, Chamoli and Tehri Garhwal districts of the region. It is, however, below 900 in Dehradun, Nainital and Uttar Kashi. The Scheduled Castes and Tribes population in the region is 15.97 per cent and 3.76 per cent respectively as compared to the respective percentages of 21.16 and 0.21 for the State, the total percentage of the two categories taken together being 19.73 per cent compared to 21.37 per cent of the state. The district-wise proportion of Scheduled Castes and Tribes population the Hill region varies respectively from 4.74 per cent in Garhwal to about 22 per cent in Uttar Kashi and from 0.01 per cent in Tehri Garhwal to 9.90 per cent in Dehradun.

Literacy in the Hill region is higher than that of the State, both for males and females, as well as, the average, being 53.79 per cent for the males, 24.18 per cent for the females and 39.30 per cent average for the region compared to 38 per cent, 14.94 per cent and 27.16 per cent for the State respectively. The level of literacy in Dehradun is above that of the Hill region. The same district has, in

fact, the highest level of literacy for the males as well as for the females in the State.

About 81.7 per cent of the total population of the region lives in rural areas compared to 82.1 per cent for the State. But in Dehradun and Nainital, about 51.14 per cent and 72.51 per cent of their respective total population lives in rural areas. Not less than 90 per cent of the total population belonging to the other districts of the region lives in rural areas.

The major source of occupation and livelihood in the Hill region is agriculture. About 69.2 per cent of the total main workers in this region is engaged in agriculture, while 74.5 per cent of the total main workers is engaged in the agricultural sector of the State. The proportion of agricultural labourers to the total main workers of the Hill region is 5.54 per cent as against about 16 per cent for the State. The districts of Pithoragarh, Garhwal, Chamoli, Tehri Garhwal and Uttar Kashi have 0.60 per cent, 0.83 per cent, 0.29 per cent and 0.58 per cent agricultural labourers of their respective total main workers. All this shows that agricultural labour is not a major source of work force in agriculture in the Hill region. The proportion of the total main workers engaged in household industries in this region is only 1.49 per cent as against about 4 per cent for the

State. The other workers in the region constitute 29.19 per cent of its total main workers which is higher than the proportion of the other workers to the total main workers of the State (see Table 3). This implies that a sizeable part of the work force in the Hill region is engaged in the secondary and tertiary activities. This inflated figure is due to highly skewed development of secondary and tertiary sectors in the region which appears to be a result of their concentration in two major districts of the Hill region, viz., Dehradun and Nainital. In these districts (i.e., Dehradun and Nainital) the other workers constitute about 63 per cent and 34.20 per cent of their respective total workers. In this respect, Garhwal is also note-worthy which shows the other workers constituting about 27 per cent of its total main workers. Despite all this, agriculture stands to be the main source of occupation and livelihood for the people in the Hill region (see Table 3 for workers).

Land and Holdings

The amount of land available for cultivation is very much limited in the Hill region. It is generally found in river valleys lying in between the hills or mountains and on hilly tracks where terrace farming is done; otherwise most of the area is rugged mountainous, covered with forests and usar and unculturable land. The tarai part of the hill region

such as that of Nainital, has useful and productive land for cultivation. But this one constitutes a very small part of the Hill region.

About 13.46 per cent of the total reporting area of the Hill region is net sown area. The area under forests is 64.43 per cent of its reporting area. The rest of the area is usar, waste and unculturable land (see Table 4).

The district-wise pattern of land utilisation shows that Chamoli and Uttar Kashi have only about 6 per cent and 3.30 per cent net sown area of their respective reporting area in the Hill region. Nainital is the only district of the region which has net sown area of about 30 per cent of its total reporting area. In other districts, the proportion of net sown area to their respective total reporting area varies from about 11 per cent in Pithoragarh to about 19 per cent in Almora. In all Hill districts, not less than 54 per cent of their respective total area is under forests. In Uttar Kashi, the area under forests constitutes 89.19 per cent of its total reporting. The proportion of usar and unculturable land is quite high in those districts which have relatively lower proportion of net sown area or area under forests or both to their respective reporting area in the Hill region. Take for instance, Pithoragarh and Chamoli wherein 36.46 and 33.24 per cent of their respective reporting area is usar and unculturable land. Uttar Kashi has an insignificant proportion

of net sown area to its reporting area being fourth-fifth of its total area under forests. All this shows that given geo-physical conditions of the region, the lower the proportion of area under forests, the higher the proportion of usar and unculturable land.

Most of the operated area is cultivated for foodgrains in the Hill region. In this region 93.19 per cent of the total cropped area falls under foodgrains. Only 6.81 per cent of the cropped area is under commercial crops. It is only Dehradun and Nainital wherein 9.18 per cent and 17.54 per cent of their respective total cropped area is cultivated under commercial crops. The proportion of area under commercial crops in the other districts varies from 0.73 per cent in Almora to 3.30 per cent in Uttar Kashi of their respective total cropped area. This means that foodgrains are grown in most of the land for cultivation in these districts of the Hill region.

According to Agricultural Census of Uttar Pradesh for 1985-86, the total number of operation holdings in Hill region is 7.67 lakhs with an area of 7.26 lakhs hectares. The average size of holdings in the Hill region is 0.95 hectare which is slightly higher than 0.93 hectare for the State. Some 71 per cent of the holdings with about 26 per cent of the total cultivated area are below 1 hectare (marginal

holdings); the average size of holding in the category being a mere 0.34 hectare. Another 16.8 per cent of the holdings with 24.5 per cent of the total area are between 1-2 hectares (small holdings); their average size being 1.38 hectares. Thus 87.68 per cent of the operational holdings in the hill region with about 50.3 per cent of the total cultivated area are below two hectares i.e., are marginal or small holdings. Compared to the Agricultural Census of 1980-81, the number of operational holdings, in the marginal and small category taken together, rose from 86.96 per cent having an area of 47.85 per cent. While the total number of operational holdings in the Hill region rose from 7.38 in 1980-81 to 7.67 lakhs in 1985-86, the total cultivated area under these holdings fell from 7.30 lakhs to 7.26 lakh hectares over the same period; the average size of holding also declined from 0.99 to 0.95 over that period (see Table 5 and 6).

A caste-wise analysis of the operational holdings indicates that some 17.10 per cent of the holdings in the Hill region are operated by Scheduled Caste and Scheduled Tribes people compared to their 19.73 per cent share in the population, which indicates that some 2.73 per cent are landless and may be engaged in other than agricultural work. The share of Scheduled Caste and Scheduled Tribes population in area of operational holdings in the Hill region is mere 14.07 per cent

and the average size of their holding is 0.77 hectare compared to the average of 0.95 hectare for all agriculturists taken together in this region (see Table 7).

Planning and Level of Development

Attention towards development of Hill region as a part of the perspective of balanced regional development began to be given in the Third Plan (1961-1966). The total planned expenditure made on development of Hill region till the Seventh Plan has been Rs. 2035.35 crores. A separate Hill Development Department was created by the State Government of Uttar Pradesh in the year 1973-74.

The basic objective of the planned efforts for hill development through public expenditure has been to develop hill areas and people, having their problems of specific nature. Given the characteristics of the hill areas and people, attention has been made on the development of agriculture and its allied activities, public utilities and services such as infrastructure and power and water supply. Since the inception of planning for hill development, a major part of the planned expenditure has been accorded to agriculture, horticulture, irrigation and power, infrastructures and public utility services. Moreover, specific rural development programmes for improving the socio-economic conditions

of the weaker sections of the region have also been launched by the Government.

As a result of the planned efforts for hill development, there has been certain amount of development in the Hill region of the State. In terms of per capita net domestic product, gross value of agricultural produce per hectare and per capita, the Hill region and some of its districts do not seem to be lagging behind the Western region, the most developed one (see Table 8 & 9) in the State, what to talk of the U.P. State in general. But these indicators of development do not present an actual picture of the Hill region and areas wherein the people live and struggle hard for subsistence. The level of per capita income is high in this region due to very low level of density of population, concentration of urban population and secondary and tertiary activities in the two major districts of the region, viz., Nainital and Dehradun. The level of agricultural produce per hectare and per capita is also high in this region because of very low population density, production of high value-horticulture in a few pockets which is mostly under the control of the state-owned private-owned large size of orchards and farms. The level of agricultural produce per hectare is also inflated because of the area under cultivation being relatively small in size.

The village economy of the Hill region is, by and large,

nature-based agricultural in character as the foregoing discussion on the occupational structure of work force shows. The occupation-wise distribution of work force shows that the secondary and tertiary activities are significant in the Hill region; but in terms of the proportion of manufacturing sector to total net output, being only about 11 per cent of the total net output of the region compared to about 24 per cent for the State, is not so significant as expected to be. The fact is that the level of industrial development is not as high as is found in the Western or Central or Eastern region or in the State as a whole.

If other indicators of agricultural development are taken into account and compared with those belonging to the other regions of the State and U.P. in general, the prevailing situation of development in the Hill regions hardly makes score over other regions of the State. Take, for instance, the yield of foodgrains per hectare in the Hill region which is 13.50 quintals per hectare as against 14.19 and 17.18 quintals per hectare for the State and the Western region respectively. However, Nainital district is exceptional wherein the yield per hectare is 21.09 quintals. This is due to the surfeit of development in the tarai areas of the district. The average level of yield in the other hill districts is below that of the Hill region in general. The

extent of irrigation, consumption of fertilizers per hectare, consumption of electricity per hectare of net sown area, the percentage of electricity consumption in agriculture to total consumption, etc. are relatively low in the region as compared to those belonging to the other regions of the State in particular and to U.P. State in general. This is true in respect of all hill districts, except Nainital and Dehradun wherein the level of development is high by any standard or norm (see Table 9). All this shows that the productive forces in Hill agriculture are not as developed as found in other parts of the State, except in case of Nainital and Dehradun to some extent.

The Hill region has experienced development in the field of infrastructure and public utilities and services. The characteristics of social development presented (in Table 10) in terms of length of pucca road per sq. km. or per lakh of population, allopathic dispensary and hospitals per lakh of population, school/college per lakh of population and other public utilities and infrastructural facilities, etc. indicate occurrence of a comparatively satisfactory level of social development in the Hill region, despite being different in its districts (see Table 10). The districts of Nainital and Dehradun (and also Almora to certain extent) fare quite well in the field of social development as compared to any other region or district in the State. So far the level of educa-

tional development is concerned, as the level of literacy and school and college education shows, the Hill region does not seem to be lagging behind any other region of the State. In this respect, the districts of Dehra Dun and Nainital are comparable with any other developed districts of the State.

So far water supply, one of the basic needs for the people, is concerned, Table shows that 78.37 per cent of the total inhabited villages suffer from scarcity of water supply for domestic consumption in the Hill region. The districts of Almora, Nainital and Tehri Garhwal present a somewhat worst condition; as more than 81 per cent of the villages face the problem of water scarcity in these districts. During the period, however, 70 per cent of the scarcity villages are covered in this region from the point of view of providing water facilities. The percentage of the scarcity villages covered under water supply scheme are cent per cent in Dehra Dun, 92 per cent in Uttar Kashi and 82 per cent in Nainital. Ranging from about 57.12 per cent in Garhwal to 21.87 per cent in Pithoragarh of their respective villages are yet to be covered in the Hill region.

All these characteristics of development of the Hill region present a mixed picture with certain 'misconception' about the level of economic development measured in terms of per capita income or per hectare produce.

Concluding Remarks

The hill areas are overwhelmingly rural, with agriculture as the main source of occupation and livelihood for the people. Due to specific geo-physical conditions of the areas, the land for cultivation is limited and there is preponderance of marginal and small holdings. The process of agricultural production, primarily based on family labour, barely produces surplus for marketing. A study¹ undertaken in 1976 indicated that only 1.19 per cent of households in this region were surplus producers who sold bulk of their surplus in the market and 91.45 per cent of the households were poor subsistence farmers who had to purchase foodgrains for self-consumption. Another study² undertaken in 1983-84 shows that all the sample from households belonging to two villages in the Chakrata Mandi area of Dehradun district had negative marketable surplus (i.e., home production - retention + repurchase) and did not market produce. This implies that, typically in the hill area the farmers did not produce enough for their self-consumption, but on the contrary, they purchased grains from the market. Why such condition of agricultural production exists in the hill villages, is an issue which can

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1. Shrimali, P.D., 'Agrarian Change, Agrarian Tensions and Peasant Movements and Organisations in U.P.', Mimographed, Lucknow University, 1981.
 2. Mishra, G.P., Fahimuddin and Bajpai, B.K., Assessment of Marketed Surplus of Foodgrains and Its Marketing Behaviour in U.P., GIDS, 1985.

be understood in the context of the political economy of the hill areas.

Secondly, comparative analysis of hill area development with that of the plains, is not only misleading but also an act of imposing the same norms or paradigm of development (as done in case of the plains) on the hill areas. The nature-based ecological conditions of the hill areas in which output is produced and labour force is engaged in agriculture and its allied activities, are different from those belonging to non-hill areas of the State.

Thirdly, the hill areas which account for the large out-migration and a 'money order-home economy' present such an economy which has been more to absorb goods produced from outside of the hill areas than to create productive employment within the areas. Having this characteristic feature of the hill economy since the colonial days, the present process of development is more eroding than integrative in the sense of maintaining ecology-specific nature of development process in the hill areas.

Finally, the socio-economic conditions of the Hill region, as presented compared to those belonging to other regions, could be understood best if the condition in which the hill people live together, work and produce goods and

services, and satisfy their wants; are properly comprehending in the context of (a) ecology-specific conditioning relations between the people and society and (b) state intervention in the arena of their relations through the process of planned development in the hill areas.

Table 2

Region/ District	Percentage of Total Population		S.T.	Percent- age of al grow- th of popula- tion (1971-81) Km)	Density of popu- lation (per sq. Km)	Sex ratio	Literacy as percen- tage of total popu- lation		Pers- ons
	Rural	S.C.					Males	Fema- les	
1. Almora	93.72	20.56	0.28	0.68	141	1081	56.66	20.27	37.76
2. Pithoragarh	94.48	19.48	3.54	0.44	55	1041	68.12	20.30	39.08
3. Dehradun	51.54	11.93	9.90	0.69	247	811	61.15	42.03	52.58
4. Garhwal	90.18	11.74	0.17	0.58	117	1091	56.26	27.13	41.06
5. Chamoli	90.99	17.26	2.52	0.33	40	1026	57.40	18.34	37.46
6. Nainital	72.51	16.47	6.51	1.03	167	841	46.81	27.10	37.81
7. Tehri Garhwal	95.87	12.77	0.01	0.45	113	1088	47.99	9.42	27.89
8. Uttar Kashi	93.05	21.93	0.95	0.17	24	881	46.32	9.17	21.92
9. Hill Region	81.70	15.97	3.76	4.36	95	959	53.85	24.11	39.29
10. UP State	82.05	21.16	0.21	100.00	377	885	38.76	14.04	27.46

Table: 3

Distribution of Workers in Hill Region
and Districts of Uttar Pradesh

Region/District	Percentage of Main Workers as				Percentage of Percentage of total			Total population
	Cultiva- tors	Agricul- tural labourers	House- hold industry	Other Workers	workers			
					Main	Margi- nal	Total	
1. Almora	73.25	1.58	1.54	23.63	79.40	20.60	39.70	
2. Pithoragarh	78.10	0.66	2.19	19.05	83.10	16.90	46.16	
3. Dehradun	27.94	7.94	1.28	62.84	95.19	4.81	34.20	
4. Garhwal	71.44	0.83	0.91	26.82	83.31	16.69	43.46	
5. Chamoli	80.92	0.34	1.95	16.79	89.36	10.64	50.07	
6. Nainital	44.69	19.10	2.01	34.20	93.76	6.24	33.79	
7. Tehri Garhwal	85.10	0.29	0.70	13.91	87.90	12.10	50.84	
8. Uttar Kashi	78.70	0.58	1.08	19.64	94.26	5.74	55.20	
9. Hill Region	63.78	5.54	1.49	29.19	87.98	12.02	41.14	
10. U.P. State	58.56	15.99	3.69	21.76	95.14	4.86	30.70	

Table 4
Characteristics and Pattern of Land
Utilisation in Hill Region in U.P.

Region/ District	Percentage of Repor- ting Area to State Area (1983-84)	Percentage of Area under forests to total reporting area (1983-84)	Percentage of net area sown to total reporting area (1983- 84)	Percentage of net area sown to cultiva- ble area (1983-84)	Percentage of small & marginal holdings to total holdings (1980-81)	Percentage of area under marginal & sm- all holdings to total area (1980-81)	Average size of mar- ginal holdings (1980- 81) (in hectare)	Average size of hold- ings in hectares (1980-81)	Per cultivator net sown area in hectare (1983-84)	Percentage of area under usar & unculti- vatable to total re- porting area (1983- 84)
1. Almora	2.54	52.20	18.90	95.03	94.92	74.64	0.36	0.61	0.84	28.90
2. Pithoragarh	2.06	53.81	10.73	86.50	94.48	71.30	0.32	0.62	0.44	36.46
3. Dehradun	1.07	63.93	18.36	89.99	86.20	44.99	0.33	0.98	0.82	12.71
4. Garhwal	2.39	63.96	13.20	90.20	69.51	40.96	0.34	1.33	0.56	22.86
5. Chamoli	2.90	61.16	5.60	96.51	89.46	61.71	0.38	0.90	0.36	33.24
6. Nainital	2.37	57.22	29.62	96.10	69.61	22.96	0.37	1.93	1.28	13.09
7. Tehri Garhwal	1.92	69.41	12.83	92.87	89.99	62.83	0.36	0.82	0.42	17.76
8. Uttar Kashi	2.68	89.19	3.30	91.40	85.07	46.53	0.28	0.92	0.32	7.51
9. Hill Region	17.93	64.43	13.46	93.15	86.96	47.83	0.34	0.99	0.65	22.11
10. U.P. State	100.00	16.93	57.15	88.55	86.94	48.29	0.37	1.01	0.91	25.92

Table 5

Number of Operational Holdings and Operated Areas under Different Land
Size Groups According to the Agricultural Censuses of 1980-81
(Area in Hectares)

Land size groups	Western Region		Eastern Region		Central Region	
	Number	Area	Number	Area	Number	Area
	1	2	3	4	5	6
0						
1. Marginal (Below 1 ha.)	3208290 (62.57) (0.39)	1263243 (20.22)	6125469 (79.53) (0.33)	2027292 (35.19) (0.41)	2290071 (70.01) (0.41)	942263 (29.87) (0.41)
2. Small (1 - 2.0 ha.)	987704 (19.26) (1.40)	1383221 (22.14)	958481 (12.44) (1.40)	1345067 (23.35) (1.40)	596313 (18.23) (1.38)	823011 (26.09) (1.38)
3. Semi-medium (2 - 4.0 ha.)	636942 (12.42) (2.76)	1757334 (28.13)	445003 (5.73) (2.72)	1210151 (21.00)	285538 (8.73) (2.69)	767684 (24.33)
4. Medium (4 - 10 ha.)	273516 (5.34) (5.62)	1536934 (24.60)	153876 (20.00) (5.68)	873446 (15.16)	91522 (2.80) (5.50)	503656 (15.96)
5. Large (10 ha. & above)	20896 (0.41) (14.70)	307086 (4.91)	18996 (0.25) (16.09)	305689 (5.30)	7620 (0.23) (15.53)	118336 (3.75)
Total	5127348 (100.00) (1.22)	6247815 (100.00)	7701875 (100.00) (0.75)	5761644 (100.00)	3271064 (100.00) (0.96)	3154950 (100.00)

Note: Figures within brackets in the middle of Region-wise and total figures indicate average size of holding in each size class and region.

Table 5 (contnd....)

Land size groups	Bundelkhand Region		Hill Region		Total	
	Region					
	Number	Area	Number	Area	Number	Area
0	7	8	9	10	11	12
Marginal (below 1 ha)	433077 (44.14) (0.48)	206957 (9.97)	515319 (69.85) (0.34)	175264 (24.00)	12572226 (70.56) (0.37)	4615019 (25.68)
Small (1 - 2.0 ha)	231403 (23.58) (1.46)	337974 (16.28)	126264 (17.11) (1.38)	174181 (23.85)	2898165 (16.27) (1.40)	4063454 (22.61)
Semi-medium (2 - 4.0 ha)	177224 (18.06) (2.76)	489829 (23.60)	68910 (9.34) (2.73)	187915 (25.73)	1613667 (9.06) (2.73)	4412913 (24.56)
Medium (4 - 10.0 ha)	117597 (11.98) (6.09)	715647 (34.47)	24683 (3.35) (5.60)	138352 (18.94)	661194 (3.71) (5.70)	3768034 (20.97)
Large (10 ha & above)	21954 (2.24) (14.82)	325468 (15.68)	2605 (0.35) (20.99)	54676 (7.48)	72071 (0.40) (15.42)	1111255 (6.18)
Total	981255 (100.00) (2.12)	2075875 (100.00)	737781 (100.00) (0.99)	730388 (100.00)	17817323 (100.00) (1.01)	17970675 (100.00)

Table 6

Number and Area of Holdings in U.P. (1985-86)
(Area in Hectares)

Land size groups	Western Region		Eastern Region		Central Region	
	Number	Area	Number	Area	Number	Area
0	1	2	3	4	5	6
Marginal	3565755 (65.02) (0.40)	1417723 (22.90) (0.40)	6654037 (81.38) (0.32)	2135618 (38.49) (0.32)	2506564 (72.09) (0.40)	1009194 (32.18) (0.40)
Small	1031064 (18.80) (1.40)	1448537 (23.39) (1.40)	953678 (11.66) (1.37)	1303395 (23.49) (1.37)	593707 (17.08) (1.37)	814747 (25.98) (1.37)
Semi-medium	625345 (11.40) (2.76)	1727813 (27.91) (2.76)	419201 (5.13) (2.68)	1125163 (20.28) (2.68)	285642 (8.22) (2.66)	758567 (24.19) (2.66)
Medium	246048 (4.49) (5.52)	1359961 (21.95) (5.52)	135281 (1.66) (5.61)	759106 (13.69) (5.61)	85077 (2.45) (5.45)	465168 (14.83) (5.45)
Large	16122 (0.29) (14.80)	238669 (3.85) (14.80)	13977 (0.17) (16.07)	224585 (4.05) (16.07)	5778 (0.16) (15.28)	88281 (2.82) (15.28)
Total	5484334 (100.00) (1.13)	6191703 (100.00) (1.13)	8176174 (100.00) (0.68)	5547867 (100.00) (0.68)	3476768 (100.00) (0.90)	3135957 (100.00) (0.90)

Note : Figures within brackets in the middle of Region-wise and total figures indicate average size of holding in each size class and region.

Table 6 (contnd...)

Land size groups	Bundelkhand Region		Hill Region		Total	
	Number	Area	Number	Area	Number	Area
0	67	8	9	10	11	12
Marginal	511379 (47.32) (0.48)	243223 (11.81)	544056 (70.91) (0.34)	187530 (25.83)	13781791 (72.59) (0.36)	4993288 (28.29)
Small	257260 (23.81) (1.44)	370651 (18.11)	128639 (16.77) (1.38)	177592 (24.46)	2964348 (15.61) (1.39)	4114922 (23.32)
Semi-medium	182713 (16.91) (2.85)	521355 (25.47)	68793 (8.97) (2.62)	180224 (24.82)	1581694 (8.34) (2.73)	4313121 (24.44)
Medium	112194 (10.38) (5.91)	662538 (32.37)	23508 (3.06) (5.60)	131658 (18.14)	602108 (3.17) (5.61)	3377431 (19.14)
Large	17144 (1.59) (14.52)	248905 (12.16)	2234 (0.29) (21.95)	49029 (6.75)	55255 (0.29) (15.39)	849470 (4.81)
Total	1080690 (100.00) (1.89)	2046672 (100.00)	767230 (100.00) (0.95)	726033 (100.00)	18985196 (100.00) (0.93)	17648232 (100.00)

Table 7

Number and Area of Operational Holdings with Scheduled Castes and Scheduled Tribes (Based on 1985-86 Agricultural Census)

Land Size groups	NAINITAL				ALMORA			
	Scheduled Total Castes/Tribes		Scheduled Total Castes/Tribes		Scheduled Total Castes/Tribes		Scheduled Total Castes/Tribes	
	Number	Area	Number	Area	Number	Area	Number	Area
0	1	2	3	4	5	6	7	8
Marginal	14176	61331	5246	23292	26280	137321	8804	50901
Small	3491	21694	4913	31569	2098	26247	2731	35389
Semi-medium	3429	20663	9414	57301	380	7828	949	20487
Medium	2815	11697	16822	67593	28	1122	142	5561
Large	270	1362	3365	33492	1	40	12	919
Total	24181	116747	39760	213247	28787	172558	12638	113247

Note: Totals include those of other castes also.

Table 7 (contnd...)

Land size groups	PITHORAGARH						KUMAON DIVISION					
	Schedu- led Castes/ Tribes	Total	Schedu- led Castes/ Tribes	Total	Schedu- led Castes/ Tribes	Total	Schedu- led Castes/ Tribes	Total	Schedu- led Castes/ Tribes	Total	Schedu- led Castes/ Tribes	Total
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
	9	10	11	12	13	14	15	16	15	16	15	16
0												
Marginal	23769	109885	6673	35932	64225	308537	20723	110125				
Small	1754	16033	2280	21580	7343	63974	9924	88538				
Semi-medium	404	5068	1022	13333	4213	33559	11385	91111				
Medium	59	914	313	4809	2902	13733	17277	77963				
Large	1	63	11	929	272	1465	3388	35340				
Total												
Percentage of SC/ST in total	25987	131963	10299	76583	78955	421268	62697	403077				
					(18.74)		(15.55)					

Table 7 (contnd...)

Land size groups	TEHRI GARHWAL						GARHWAL					
	Schedu- led Castes/ Tribes			Schedu- led Castes/ Tribes			Schedu- led Castes/ Tribes			Schedu- led Castes/ Tribes		
	Total			Total			Total			Total		
	Number	Area	20	Number	Area	21	Number	Area	22	Number	Area	23
0	17	18	19	20	21	22	23	24				
Marginal	8485	57234	2186	13935	6001	20054	1983	6738				
Small	955	10880	1302	15256	1303	6700	2093	9046				
Semi-medium	173	4596	718	12171	625	4691	1637	12359				
Medium	61	828	330	4331	75	1030	381	5360				
Large	2	34	30	478	-	34	-	472				
Total	9676	73572	4566	46171	8004	32509	6094	33975				

Table 7 (contd...)

Land size groups	TEHR GARHWAL				GARHWAL			
	Schedu- led Castes/ Tribes	Total	Schedu- led Castes/ Tribes	Total	Schedu- led Castes/ Tribes	Total	Schedu- led Castes/ Tribes	Total
	Number	Area	Number	Area	Number	Area	Number	Area
	25	26	27	28	29	30	31	32
0								
Marginal	7695	60675	2328	23418	8567	49019	2443	16475
Small	744	19732	994	27188	1038	18464	1428	25308
Semi-medium	159	7351	406	19377	477	12863	1279	34911
Medium	13	1057	61	5497	129	4765	723	26941
Large	-	24	-	308	16	519	293	8730
Total	8611	88839	3789	75788	10237	85630	6166	112365

Table 7 (contnd..)

Land size groups	Schedu- led Castes/ Tribes		Schedu- led Castes/ Tribes		Schedu- led Castes/ Tribes		Schedu- led Castes/ Tribes		Total
	Number	Area	Number	Area	Number	Area	Number	Area	
0	33	34	35	36	37	38	39	40	
Marginal	9437	48537	3463	16839	40185	235519	12403	77405	
Small	2889	8889	4156	12256	6929	64665	9973	89054	
Semi-medium	2406	5733	6989	15695	3840	35234	11029	94513	
Medium	822	2095	4401	11566	1100	9775	5896	53695	
Large	44	158	586	3701	62	769	909	13689	
Total	15598	65412	19595	60057	52116	345962	40210	328356	
Percentage					(15.06)		(12.25)		

Table 7 (contnd..)

Land size groups	TOTAL HILL REGION				
	Scheduled Castes/Tribes		Total		Total
	Number	Area	Number	Area	
0	41	42	43	44	
Marginal	104410	544056	33126	187530	
Small	14272	128639	19897	177592	
Semi-medium	8053	68793	22414	185624	34
Medium	4002	23508	23173	131658	
Large	334	2234	4297	49029	
Total	131071	767230	102907	731433	
Percentage	(17.08)		(14.07)		

Table 8

Indicators of Industrial Development

Region/ District	Value added per industrial wor- kers in Rs.1000 (1983-84)	Percentage of manufacturing to total output at current prices (1983-84)	Number of persons in registered in- dustrial establi- shments per lakh of population (1983-84)
1. Almora	16.55	9.0	84
2. Pithoragarh	58.48	6.7	67
3. Dehradun	27.19	32.9	1152
4. Garhwal	19.53	3.5	37
5. Chamoli	-	5.3	-
6. Nainital	12.29	11.4	930
7. Tehri Garhwal	9.84	3.6	21
8. Uttar Kashi	17.14	4.9	36
9. Hill Region	18.14	10.7	436
10. U.P. State	26.17	23.6	608

Table 9

Indicators of Agricultural Development

Region/ District	Gross value of agricultural produce at current price (1983-84)						
	Hectare	per ha	Average yield of foodgrains per hectare in qtl. (1983-84)	Percentage of total cropped area irrigated (1983-84)	Per tractor cropped area in hectares (1983-84)	Intensity of cropping	Per hectare consumption of fertilizers in kg. (1983-84)
0	1	2	3	4	5	6	7
1. Almora	4658	905	10.13	9.6	-	153.62	3.48
2. Pithoragarh	7018	963	11.46	9.6	-	177.25	4.64
3. Dehradun	6312	885	12.29	37.4	220.85	153.00	31.38
4. Garhwal	4606	889	9.92	10.9	14207.80	151.13	4.48
5. Chamoli	6564	2291	11.26	7.2	-	154.83	4.41
6. Nainital	9911	615	21.09	61.2	52.12	169.57	137.51
7. Tehri Garhwal	4521	649	10.39	17.8	-	153.78	3.33
8. Uttar Kashi	6107	849	12.40	20.3	-	160.20	18.22
9. Hill Region	6665	1146	13.50	28.81	159.94	160.38	46.20
10. U.P. State	5861	1054	14.19	48.50	177.63	148.57	65.54

Source : District-wise Indicators of Development, December 1986, Area Planning Division, State Planning Institute, Lucknow.

Table 9 (contnd...)

Region/ District	Number of energised private pumpsets and tube- wells (upto '86)	Percentage of area under commercial crops to total cropped area (1983-84)	Consump- tion of electrici- ty per hectare of net sown area (1983-84)	Percentage of elec- tricity consumpti- on in agri- culture (1983-84)	Percentage of electri- fied villa- ges (1986)	Number of cold sto- rage 1000 Sq. Km. of area (1984-85)	Number of agricul- tural mar- keting centres (1984-85)
0	8	9	10	11	12	13	14
1. Almora	19	0.73	10.22	6.25	57.03	-	1
2. Pithoragarh	-	1.48	6.89	2.69	36.73	-	1
3. Dehradun	324	9.18	101.22	1.91	69.36	-	4
4. Garhwal	19	0.75	5.34	4.60	32.61	-	2
5. Chamoli	2	1.23	2.12	2.87	44.16	-	1
6. Nainital	5273	17.54	122.31	16.78	88.99	0.74	10
7. Tehri Garhwal	10	1.30	7.97	2.70	36.01	-	2
8. Uttar Kashi	3	3.33	-	-	100.00	-	1
9. Hill Region	5650	6.81	49.27	6.42	51.28	0.10	22
10. U.P. State	511801	11.28	192.78	28.35	59.88	2.49	292

Table 10
Infrastructural Facilities in Hill Region Districts in U.P.

Region/ District	Cre- dit- posi- ra- tio (1985)	Popu- lation per Bank Branch (in '000) (1985)	Per 100 Sq.Km. popu- lation (1985)	Per lakh of popu- lation (1984-85)	Popu- lation Fair Price of Shop '000 (1984-85)	Number of Post Office lakh of popu- lation (1984-85)	Number of Schools and Deg- ree Colle- ge per lakh of popu- lation (1985)	Number of Industrial Training Institute (1985)	Number of Polytech- niques	Number of Allopathic Hospitals and Dispen- sary per lakh of po- pulation (1984)
0	1	2	3	4	5	6	7	8	9	10
1. Almora	24	10.52	55.26	393.13	0.98	56	38.31	5	2	13.76
2. Pithoragarh	31	5.78	18.93	234.15	0.81	76	50.31	5	1	16.14
3. Dehradun	23	6.51	39.05	158.27	1.96	32	34.25	3	1	13.36
4. Garhwal	22	12.04	33.00	281.35	0.91	64	58.47	5	1	17.93
5. Chamoli	21	12.56	12.70	318.40	0.64	84	58.23	4	1	17.75
6. Nainital	56	9.24	32.10	191.82	1.84	23	34.04	6	3	10.05
7. Tehri Garhwal	33	13.10	28.88	256.43	0.67	50	46.95	3	1	12.93
8. Uttar Kashi	36	10.61	9.99	419.37	0.71	61	64.91	3	1	17.24
9. Hill Region	31.06	10.05	25.50	269.20	1.04	49	43.98	34	11	13.92
10. U.P. State	46.00	16.06	27.56	73.19	4.01	16	18.79	91	75	2.91

CHAPTER III

SAMPLE DISTRICTS, VILLAGES AND HOUSEHOLDS

The districts of Almora and Tehri Garhwal were selected for the sample for the purposes of this study. Both districts are situated in the middle part of the Hill region. The district Almora is bounded by Nainital in the south, Pithoragarh in the east, Chamoli in the north and Garhwal in the west. The district Tehri Garhwal has Dehradun in its west, Uttar Kashi in its north, Chamoli in its north-east and Garhwal in its south. Both districts are situated in the mountainous region of the Himalayas and consist of numerous ridges and valleys. Almora has 2967 inhabited villages, while Tehri Garhwal has 1958 inhabited villages. Both have five town areas each.

Part I

POPULATION, LABOUR FORCE AND OCCUPATION

Almora has a population of 7,57,000, a population density of 141 persons per square Km., with 93.72 per cent rural and 6.28 per cent urban population; 21.43 per cent of it being scheduled caste and scheduled tribes population. The sex-ratio is 1,031 females per 1000 males. Tehri Garhwal has a population of 4,93,000, a population density

of 113 persons per sq. Km., with 95.87 per cent of it being rural and 4.13 per cent urban. The scheduled caste and tribes population is 12.80 per cent of the district population, while the sex-ratio is 1,088 females per 1,000 males. The literacy rate in Almora is 37.76 per cent, with 56.66 per cent among males and 20.27 per cent among females. In Tehri Garhwal, the literacy rate is 27.89 per cent, with 47.99 per cent among males and 9.42 per cent among females. The literacy rate (i.e., percentage of literates to total population) - whether for males or females or both combined - is higher in Almora than what is found in Tehri Garhwal.

The percentage of total main workers in the total population is 29.22 per cent in Almora and 41.59 per cent in Tehri Garhwal, it being 28.81 per cent and 41.71 per cent respectively for the rural main workers in the two districts to the total rural population and 35.64 per cent and 33.87 per cent respectively for the urban main workers to the total urban population of the district. The percentage distribution of main workers among rural and urban workers was 92.69 per cent and 7.31 per cent for Almora and 96.10 per cent and 3.90 per cent for Tehri Garhwal respectively as indicated in Table 11 below.

Table 11

Percentage of Main Workers to Total Population
and Their Percentage Distribution in Rural and
Urban Areas

District	Percentage of Main Workers to total District Population			Percentage Distribu- tion of Main Workers		
	Rural	Urban	Total	Rural	Urban	Total
1. Almora	28.31	35.64	29.22	92.69	7.31	100.00
2. Tehri Garhwal	41.71	38.87	41.59	96.10	3.90	100.00
Total Hill Region	36.35	31.39	35.44	83.67	16.33	100.00

The cultivators constituted the bulk of the main workers, their percentage in the total main workers being 73.25 per cent for Almora and 85.10 per cent for Tehri Garhwal. The agricultural labourers constituted a negligible proportion, being a mere 1.52 per cent in Almora and 0.29 per cent in Tehri Garhwal. The proportion engaged in household industry in Almora and Tehri Garhwal was 1.54 per cent and 0.70 per cent respectively, while those engaged in other activities constituted 23.63 per cent and 13.91 per cent respectively in the two districts. Their distribution is indicated in Table 12 below.

Table 12

Percentage Distribution of Main Workers by Activity

District	Cultiva- tors	Agricul- tural workers	House- hold industry	Others
1. Almora	73.25	1.52	1.54	23.63
2. Tehri Garhwal	85.10	0.29	0.70	13.91
Total Hill Region	64.88	5.71	2.19	27.22

The bulk of the female labour force was concentrated in cultivation, their percentage to total female labour force being 94.84 per cent in Almora and 98.11 per cent in Tehri Garhwal, while a substantial proportion of male labour force was engaged in other activities, their percentage proportion to total male labour force being 32.88 per cent in Almora and 27.00 per cent in Tehri Garhwal.

Some 13.60 per cent of the total population of Almora and 4.95 per cent of the population of Tehri Garhwal were marginal workers, while the proportion of non-workers to the total population of the two districts was 52.18 per cent and 53.46 per cent respectively. Thus the workers' participation rate (inclusive of marginal workers) in the two districts respectively was 47.32 per cent and 46.54 per cent as indicated

in Table 13.

Table 13

Percentage of Marginal Workers, Non-workers and
Participation Rate in Total Population

District	Marginal workers	Non- workers	Workers' participation Rate
1. Almora	18.60	52.18	47.82
2. Tehri Garhwal	4.95	53.46	46.54
Total Hill Region	7.89	56.67	43.33

The Land Use and Pattern of Land Holdings

Some 52.20 per cent of the Reporting Area in 1983-84, the latest year for which the data is available, was under forests and 18.90 per cent was net area under cultivation in Almora. The corresponding figures for Tehri Garhwal were 69.41 per cent under forests and 12.83 per cent under cultivation. The net area sown as a percentage of cultivable area was 95.03 per cent in Almora and 92.37 per cent in Tehri Garhwal. Net area sown per cultivator and per capita rural population was respectively 0.84 hectare and 0.20 hectare in Almora. The

corresponding figures for Tehri Garhwal were 0.42 and 0.14 hectares respectively.

In Almora, 79.53 per cent are marginal holdings according to 1985-86 Agricultural Census and their share in the area operated is 44.95 per cent. Another 15.21 per cent are small holdings sharing 31.25 per cent of operated area. Thus 94.79 per cent of the holdings were below two hectares sharing 76.20 per cent of the area operated. Some 0.67 per cent holdings of four hectares and above shared 5.72 per cent of area operated. The cultivators belonging to Scheduled Castes and Scheduled Tribes had only 16.63 per cent share in the total holdings with only 11.16 per cent of the area operated. The bulk, 99.53 per cent of the holdings with Scheduled Castes and Scheduled Tribes cultivators were below two hectares. The average size of holdings is 0.67 hectares in case of Scheduled Castes and Scheduled Tribes people the average size of holding is 0.44 hectare only.

In Tehri Garhwal, the percentage of marginal holdings is 68.30 per cent with 30.90 per cent share in the operated area. Another 22.21 per cent of the holdings are small sharing some 35.87 per cent of the area. Thus 90.51 per cent of the

holdings are below two hectares with only 58.08 per cent in the area. The holdings with cultivators belonging to Scheduled Castes and Scheduled Tribes were concentrated in the marginal and small categories, respectively being 89.36 and 8.64 per cent. Thus 98.00 per cent of the holdings belonging to Scheduled Castes and Scheduled Tribes cultivators were of below two hectares size. Their share in the total number of operational holdings in the district is 9.69 per cent with only 4.10 of the area operated. It may, however, be noted that in Tehri Garhwal there are no Scheduled Tribes holdings. The detailed data relating to the two sample districts are presented in Table 14. The average size of holdings is 0.85 hectare, while for Scheduled Castes and Scheduled Tribes, the average size of holdings is 0.44 hectare.

Level of Agricultural and Industrial Development

Irrigation facilities are meagre and only 7.72 per cent of net area sown in Almora and 14.39 per cent in Tehri Garhwal is irrigated. There are no private tubewells in both districts. No tractors are reported in these districts. Per hectare consumption of fertilizers also is low at 3.48 Kg. in Almora and 3.33 Kg. in Tehri Garhwal.

Table 14

Number and Area of Operational Holdings and Their
Caste-wise Distribution
(Based on 1985-86 Agricultural Census)

(Area in Hectares)

Size class (Hectares)	Total					
	SC/ST	Others	3	SC/ST	Others	Total
0	1	2	3	4	5	6
1. Marginal (Below 1.0)	26280 (91.29)	111041 (77.23)	137321 (79.50)	8804 (69.66)	42097 (41.84)	50901 (44.95)
2. Small (1.0 - 2.0)	2098 (7.29)	24149 (16.80)	26247 (15.21)	2731 (21.61)	32653 (32.46)	35389 (31.25)
3. Semi-medium (2.0 - 4.0)	380 (1.32)	7443 (5.18)	7823 (4.54)	949 (7.51)	19523 (19.41)	20477 (18.03)
4. Medium (4.0 - 10.0)	28 (0.10)	1094 (0.76)	1122 (0.65)	142 (1.12)	5419 (5.39)	5561 (4.91)
5. Large	1 (Neg)	39 (0.03)	40 (0.02)	12 (0.10)	907 (0.90)	919 (0.81)
Total	28787 (100.00) /16.68/	143771 (100.00) /83.32/	172558 (100.00) /100.00/	12638 (100.00) /11.16/	100609 (100.00) /88.84/	113247 (100.00) /100.00/
Average size	0.444		0.67			

Notes: SC - Scheduled Castes; ST - Scheduled Tribes; Neg. - Negligible.

Table 14 (contnd..)

Size class (Hectares)	TEHRI GARHWAL									
	Number of Holdings					Area of Holdings				
	SC/ST	Others	Total	SC/ST	Others	Total	SC/ST	Others	Total	Total
0	7	8	9	10	11	12				
1. Marginal (Below 1.0)	7695 (89.36)	52980 (66.04)	60675 (68.30)	2328 (61.44)	21090 (29.29)	23418 (30.90)				
2. Small (1.0 - 2.0)	744 (8.64)	18988 (23.67)	19732 (21.21)	994 (26.23)	26194 (36.38)	27188 (35.87)				
3. Semi-medium (2.0 - 4.0)	159 (1.85)	7192 (8.96)	7351 (8.27)	406 (10.72)	18971 (26.35)	19377 (25.57)				
4. Medium (4.0 - 10.0)	13 (0.15)	1044 (1.30)	1057 (1.19)	61 (1.61)	5436 (7.55)	5497 (7.25)				
5. Large (Above 10.0)	-	24 (0.03)	24 (0.03)	-	308 (0.43)	308 (0.41)				
Total	8611 (100.00) /9.69/	30228 (100.00) /90.31/	38839 (100.00) /100.00/	3789 (100.00) /4.10/	71999 (100.00) /95.90/	75788 (100.00) /100.00/				
Average size	0.44		0.85							

Number of livestock per 100 hectare is 95 in Almora and 62 in Tehri Garhwal and the number has declined in both districts over 1978-82 period. Percentage consumption of electricity in agriculture to total consumption is only 6.25 per cent and 2.70 per cent in Almora and Tehri Garhwal respectively, while per capita consumption of electricity itself in the two districts is low at 30.36 KWH and 43.61 KWH respectively compared to 113.94 for the Hill region taken as a whole. Generally, food crops are sown; some vegetables also are grown. But percentage of area under commercial crops to gross cropped area is only 0.73 per cent in Almora and 1.30 per cent in Tehri Garhwal. Though the intensity of cropping is 153.62 in Almora and 153.78 in Tehri Garhwal, the average yield of foodgrains is low at 10.13 quintals per hectare and 10.39 quintals per hectare in the two districts compared to 13.50 quintals for the Hill region and 14.19 quintals for the State. Only one agricultural marketing centre in Almora and two in Tehri Garhwal districts and no cold storage in any of them, nor any processing unit are reported.

There are very few industries in these districts. The number of persons in registered industrial units per lakh of population is mere 84 in Almora and 21 in Tehri

Garhwal compared to 437 in the Hill region and 603 in Uttar Pradesh. Percentage of manufacturing sector output to total net output at current prices in 1983-84 was reported to be 9.0 per cent for Almora and mere 3.6 per cent for Tehri Garhwal compared to 10.7 per cent for the Hill region and 23.6 per cent for the State.

Part II

THE SAMPLE VILLAGES

As mentioned in chapter I, three villages each were selected for depth study from each of the sample districts. The three villages from Almora district are Deoli, Malgaon and Falseema and from the district Tehri Garhwal, the selected villages are Arakota, Bada Sweeta and Manjud. Presented here is the information collected for the sample villages on the basis of the Village Schedule.

The Sample Villages in Almora District

(a) Deoli : The Deoli village is situated at a distance of about 15 Km. from the main urban centre and is in Haulbagh Block. The village has 98 households with the reported total population of 482 persons, out of whom 238 are males and 244 are females. The sex ratio works out to

be 1020 females per thousand males according to the reported population. Some 46 persons were reported to be belonging to Scheduled Castes; there were no Scheduled Tribes persons in the village. The literacy rate for the village was reported to be 27.17 per cent, 34.87 per cent being for the males and 19.67 per cent for the females. Out of the total population, 376 persons were reported as non-workers i.e., the labour force participation rate was only 21.73 per cent. Out of the 106 persons reporting as workers, 105 were main workers and only one, a woman, was a marginal worker. Bulk of the main workers, 73 persons, i.e., 69.53 per cent were cultivators and the rest, i.e., 32 persons constituting 30.47 per cent were engaged in other activities. None was reported to be an agricultural labourer or engaged in mining or industry, including household industry. The wage rate of agricultural labourer varies from Rs.10 to Rs.15 in the village. Out of the total main workers, 91.42 per cent are males and 8.53 per cent are females. The village, being situated on the side of the main highway connecting Almora with Kathgodam, has a locational advantage. There is also a toll barrier at this point, because of which every passing bus or taxi has to halt at this place. This has provided an opportunity to the residents of this village to open small restaurants and other servicing shops and, therefore,

the people of this village generally do not go out to the city for seeking employment.

Every household has a strip of land available to it for cultivation, hence there are no landless and the bulk of the main workers are engaged in cultivation. The 98 land holdings have an area of 105.28 acres cultivated area available to them in this village. The land holdings pattern in the village indicates that the bulk of the holdings, i.e., 88.0 per cent are marginal holdings upto 2.5 acres size, 64 per cent being upto one acre and another 24 per cent being between 1.00 to 2.50 acres size. Another 9.0 per cent are small holdings, i.e., between 2.50 to 5.00 acres. Only two households, i.e., 3.00 per cent of holdings have holdings of 5.00 to 10.00 acres. The share in the total operated land of each class is highly inequitous. The 64.0 per cent holdings upto 1.00 acre have only 25.75 per cent of the land; the 88.0 per cent of those with holdings upto 2.50 acres have 60.33 per cent share in land. The 9.00 per cent holdings between 2.50 to 5.00 acres have 26.99 per cent of land, while 9.00 per cent having holdings between 5.00 to 10.00 acres have 12.67 per cent of land. Cultivators generally render mutual help without remuneration during busy periods of agricultural work. Only some engage ploughman to plough their fields; they are hired at

the rate of Rs.50 to Rs.60 per day and they come with their ploughs and the bullocks.

The main source of irrigation is a natural stream and about 20 to 22 per cent land is irrigated by it. The rest depends on rains. The main crops are wheat, rice and ragi. Only a few grow vegetables and use fertilizers for it. The use of insecticides and pesticides is almost non-existent. The yields are low. Most of the cultivators are subsistence farmers.

Only about five per cent of houses are fitted with water pipes for drinking water. The rest depend on the streams.. Some 22 to 25 per cent of the houses are electrified. Some 20 to 30 per cent of houses are pucca, the rest are partially or wholly kutcha.

There is a Primary, Junior Basic and a Higher Secondary School located within the village. One family welfare centre, post office and fair price shop are also located in the village. There is no weekly village market, but requirements of the village are mostly met by the shops on the roadside. Facilities like primary health centre, allopathic hospital, seed and fertilizer store and telegraph office are available only in Almora city.

Barring one Ata chakki, there is no other industrial or processing unit. This too is currently non-operational.

Some welfare schemes like the old age pension scheme, the IRDP, the Jawahar Rozgar Yojana were introduced in 1987 and 1989 respectively and some families were benefited from them. The number of beneficiaries under the old age pension scheme was reported to be 25 in the village.

(b) Malgaon : The Malgaon village is also situated in Haulbagh block, at a distance of about 5 Kms. from the block and Almora urban centre. The village is not easily approachable; the nearest bus station is 5 Kms. away in the Almora city and no other transport facility is available from the city to the village. The village has 159 households and a population of 365 persons, with 59 persons belonging to Scheduled Castes and 4 persons to Scheduled Tribes. Out of the total population, 439 are males and 426 females, i.e., the sex ratio is 970 females per 1000 males. About 23.67 per cent are literates; the percentage of literates among males being 31.66 per cent and among females being 14.32 per cent. Some 510 persons out of the total population of 865, i.e., 58.88 per cent, are non-workers and only 355, i.e., 41.12 per cent, inclusive of 212 marginal workers constitute the total labour force. Out of the total labour force, 199, i.e., 56.06 per cent are females, but bulk of these, i.e., 193 or nearly 97 per cent

are marginal workers engaged in cutting and collecting fire-wood, cutting grass and assisting in cultivation. The main workers are only 143, i.e., 40.23 per cent of the total labour force and 16.53 per cent of the total population. Out of the main workers, 59, i.e., 41.27 per cent are cultivators; 5, i.e., 3.49 per cent are engaged in household and other industrial or processing units, and 79, i.e., 55.24 per cent are engaged in other activities.

All the 159 households have landholdings but all of them belong to the category of marginal holdings, i.e., upto 2.50 acres. The bulk, i.e., 149 or 93.71 per cent are upto 1.00 acre size and have 83.36 per cent land area to their share. The remaining 10, i.e., 6.29 per cent are holdings between 1.00 to 2.50 acres having 11.64 per cent share in land area. There are thus, no landless and agricultural workers as hired workers on farms cannot be afforded. Most of the rural workers have to look for work outside the village, in mining, road construction, transport of marketable goods in urban market centre etc. Their wages range between Rs.15 to Rs.30 per day, but on an average work is available only for 175 days in a year.

Irrigation through natural sources is available to about 12 to 15 per cent of the cultivated area. Paddy, Ragi, peas, potato and other vegetables are the main

crops. Except for potato, the yields are low, varying between 5.00 quintals to 11.50 quintals per hectare.

The natural stream located at a distance of 1 Km. from the village is the main source of drinking water also. But it dries up in the summers and then women have to fetch drinking water from a distance of 2 to 5 Kms. The pipe line for supply of drinking water has been laid, but no water storage tank or pumping facility is yet available. Only 16 houses are pucca and electrified; the rest are kutcha and without electricity.

Only one primary school is available in the village. No other infrastructural facility is available in the village and people have to go to city 5 Kms. away for them. There being no link road, it is a bit arduous for them to get at them.

There is no industrial or processing unit within the village. Some artisans, like shoe-makers and tailors, have to go out and work in the urban centre of Almora city.

Some welfare schemes were operated but with meagre benefit to the village folk.

(c) Falseema : Falseema village is situated in Haulbagh block, about 12 Kms. away from the city. The bus operating

from Almora city helps to cover 7 Kms. of this distance; remaining 5 Kms. have to be covered on foot. There are 55 households in this village with a total population of 693, 396 of them being males and 297 females. Thus, there are 750 females per 1000 males. 93 persons, or 14.14 per cent belong to Scheduled Castes and none to the Scheduled Tribes. The literacy rate is 27.27 per cent, female literacy being lower at 17.17 only. 43.00 per cent of the total population constitutes the labour force (inclusive of marginal workers) whose percentage is very low, being only 1.15 per cent. The remaining 57.00 per cent are non-workers. The main workers comprise 41.85 per cent of the total population. Some 43 per cent of the total main workers are women. 85.23 per cent of the cultivators are women and constitute 92.03 per cent of the total main workers and 87.59 per cent of the total female workers. 82.78 per cent of male workers are engaged in other activities and only 14.57 per cent of the male work force is engaged in cultivation. Thus women bear the main burden of agricultural work. Women are also more active section of the working people, as is indicated by the fact that 61.71 per cent of the total non-workers are males.

The households out of the total 55 households in this

village have no land, i.e., 3.64 per cent are landless and they work in activities other than that of agricultural labourer mainly because the households cultivating land can hardly afford to hire labour for farm work; they resort to mutual assistance. The rest, i.e., 53 households or 96.36 per cent have land holdings. 92.45 per cent of land holdings are of upto 1.00 acre size and have 70.33 per cent of land to their share. Another 5.66 per cent of the land holdings are between 1.00 to 2.50 acres size having 19.51 per cent of land. The rest 1.39 per cent land holdings have 10.16 per cent of land as their share. Since all the land holdings fall in the categories of marginal and small holdings, the landless and considerable proportion of marginal and small farmers provide labour for non-agricultural work.

Only 10 to 12 per cent land is irrigated, the rest depends on rains. Wheat, rice, mandua and some vegetables are grown, but their yield is low and uncertain.

For drinking water, the village has to depend on natural stream situated nearby but during the summers, when stream water is depleted, the villagers have to fetch drinking water from 3 to 4 Kms. distance.

There is no pucca road connecting the village to the main road or other villages. There is no weekly market in the village.

About 20 per cent of the households have electric connections and a little fewer are pucca.

Only one primary school is situated in the village. No other infrastructural facility is available in the village and the village folk have to walk to the town some 7 Kms. away. One fair price shop catering kerosene only is located 1.5 Kms. away from the village. There is no industry in the village. Only three families are found to be running tailoring shops in the village.

Welfare schemes like Jawahar Rozgar Yojana, IRDP and old age pension schemes are operated but the benefit was available only to 10 to 12 persons.

The Sample Villages in Tehri Garhwal District

(a) Arakota : The village Arakota is situated at a distance of about 3 Kms. north-west of Chamba town of the Tehri Garhwal district. The village, being situated at the hill top, it is relatively difficult to reach. Besides this, its households are scattered over a radius of one and a half Kms.

The village has 116 households with a total population of 293, 40 per cent of them being males and 60 per cent females. The sex ratio is 1504 females per 1000 males. 4.4 per cent of the population are Scheduled Caste people. The literacy rate is 28.00 per cent, male literacy rate being high at 56.00 per cent and female literacy rate being low at mere 10.00 per cent.

The labour force participation rate is 47.78 per cent, some 52.22 per cent being non-workers. All the workers-140 in number-are main workers, none being marginal workers. 136 workers, i.e., 97 per cent of the total main workers are cultivators, while remaining 4 workers are engaged in other activities; there are none in industry.

Every household has a strip of land for cultivation. Nearly 72 per cent of the holdings are upto one acre and share 57 per cent of the land. The remaining 28 per cent holdings are between 1.00 to 2.00 acres and have 43 per cent of land to their share.

There are no industrial or processing units in the village. There is only one tailoring shop. The village people have to go to Chamba town for their daily needs.

There is arrangement for supply of drinking water through water taps but this facility is available only to 17 per cent of the households. The rest depend on the natural stream.

Some 20 per cent of the cultivated land is irrigated with the help of the natural stream; the rest depends on rains.

There is one primary school in the village. None of the other infrastructural facilities are available in the village and for them, the villagers have to go to the Chamba town.

Some 26 per cent of houses are pucca and the rest are kutcha. Only about 17 per cent of the houses are connected with electricity. There is no weekly market in the village. Except a few houses which are on the side of a pucca road, all the rest are connected with kutcha road.

There are no agricultural workers. This is mainly because the households have very small holdings and cannot afford to hire labour for work on the farms. The general practice during peak time of agricultural operations is to rely on free mutual assistance, which is a very notable feature in this region. But workers to out to work on construction and other work for which the

usual daily wage is Rs.36 for skilled male and Rs.25 for unskilled male. The wage rate for female labour is Rs.30 for skilled female and Rs.22 for unskilled female. But the work is of casual nature.

Some welfare schemes like old age pension and Jawahar Rozgar Yojana are operational in the village with some households deriving benefit from them.

(b) Bada Sweeta : The Bada Sweeta village is located at a distance of 1.5 Kms. north-west of Chamba town of the Tehri Garhwal. The village is linked to Chamba town with a kutchra road. It has 122 households spread over a radius of about 2 Kms., with a population of 397 persons. Some households have their members as retired army men or currently employed in the army or other jobs outside, who send remittances to their home. But the bulk derive their subsistence from cultivation or through wage-labour performed on construction work. A few go out for ploughing others' field for wages. Some 42 per cent of the population are males and the ratio of females to males is 1406 females per 1000 males. Some nine per cent of the people belong to Scheduled Castes. The literacy rate is 33.75 per cent, female literacy being only 14.22 per cent and male literacy being 61.21 per cent.

There are 222 persons, i.e., 55.92 per cent, reporting as non-workers. Thus the labour force participation rate is 44.03 per cent. Those reporting as marginal workers are 54, i.e., 13.60 per cent of the population. Some 121 or 30.48 per cent reported as main workers, out of whom 88.43 per cent are cultivators and remaining 14 workers, or 11.67 per cent are engaged in other activities. There are none in industry or processing units. There are also no agricultural workers for the same reason as stated in the case of earlier village.

All the households have some strip of land available to them for cultivation. But 120, i.e., 98.36 per cent of the holdings are upto 1.00 acre size having 77.10 per cent of land as their share, while two households have their holdings between 2.50 to 5.00 acres, having 32.90 per cent of land with them.

Except for one Ata chakki (flour mill), there is no other industrial or servicing unit in the village.

The main source of drinking water is the natural stream. There is, however, arrangement for supply of piped water through taps, but, only some 25 per cent of the households derive benefit from it.

Except for one primary school, no other educational, health or other infrastructural facility is available in the village. It is available at Chamba town.

Some ten per cent of the cultivated land is irrigated with the help of the natural stream water.

About 92 per cent of the total houses are kutcha.

The wage rate is Rs.35 for skilled male and Rs.25 for unskilled male, while it is Rs.22 for female worker.

Welfare schemes like old age pension, Jawahar Rozgar Yojana and IRDP have been under operation in this village. Some fifteen persons are reported to be getting old age pension; about six persons are reported to have benefited under IRDP scheme and kutcha link road between the village and Chamba town has been constructed under Jawahar Rozgar Yojana.

(c) Manjud : The village Manjud is situated at a distance of about 3 Kms. south-west of Chamba town of the Tehri Garhwal district. The accessibility to the village is rather difficult as it is situated deep down in the hills. There are 55 households in this village scattered over a radius of one and a half Kms. The total population of the village is 362 persons, of whom 209, i.e.,

57.73 per cent are males and the rest 42.27 per cent are females. Some 13.81 per cent belong to Scheduled Castes. The sex ratio is 732 females per 1000 males. About 40.06 per cent are literates; the male literacy is 53.58 per cent and the female literacy is 21.57 per cent.

Those reporting as non-workers are 204 persons or 56.35 per cent of the population. The labour participation rate, therefore, is 43.65 per cent. Among those reporting as workers, 143, i.e., 39.50 per cent of the total population are main workers, while 4.15 per cent reported as marginal workers. 68 persons, i.e., 18.78 per cent of the total population and 47.55 per cent of the main workers are cultivators. The remaining 52.45 per cent of the main workers are engaged in other activities. None are engaged in industry or services units. Again none reports as agricultural worker, mainly for the reason stated in the case of earlier villages.

All the households have a land holding for cultivation. 80.00 per cent of the land holdings are of upto 1.00 acre size and have 47.85 per cent share in the cultivated area. Another 10.90 per cent have holdings between 1.00 to 2.50 acres with 17.98 per cent share in the area held. Only five households, i.e., 9.10 per cent have

holdings between 2.50 to 5.00 acres with 34.17 per cent of the cultivated area as their share.

Some 16.00 per cent of the cultivated area is irrigated with the water drawn from the natural stream.

The main source of drinking water is the natural stream. But piped water is also available, which is availed of by about 30.00 per cent of the households; the supply, however, is erratic.

No other infrastructural facility is available within the village. For all of them, health, education, agricultural inputs, postal facility, shopping and marketing, the village people have to go to Chamba town which is linked to the village by a kutchha road.

Except one Ata chakki (flour mill), no other industrial or servicing unit exists in the village.

Most of those seeking work outside agriculture or in addition to cultivation, engage in construction work on houses or road. A few take up work at Tehri Dam project, while another few have petty shops in Chamba town.

Welfare schemes like old age pension, Jawahar Rozgar Yojana, IRDP are operated with meagre benefit to a small section of the village.

Part III

THE SAMPLE HOUSEHOLDS

A sample of 50 households from each of the six villages in the districts of Almora and Tehri Garhwal was selected for investigation into the problems and requirements of rural labour. In the preceding section was presented the information relating to these six sample villages collected from secondary sources, as well as, in the course of listing the households and through field observation. The data being presented in the succeeding sections of this chapter and in the succeeding chapters relate to three hundred households, fifty from each of the six sample villages and one hundred fifty from each of the two sample districts.

1. Population, Workers, Dependents

The data relating to population, workers and dependents are presented in Table 15, village-wise, district-wise and for the Hill region on the basis of the data collected for sample households. On the basis of this data, the average size of household in Almora district works out to 5.23; in Tehri Garhwal district, it works out

Table 15

Average Size of Households, Sex Ratio, Workers' Participation Rate and Dependency Ratio

Village	Total Number of households	Total Population			Average Sex size of Ratio house-holds			Total Workers		
		1	2	3	4	5	6	7	8	9
0										
1. Deoli	50		163	126	294	5.33	750	95	63	153
2. Malgaon	50		162	116	278	5.56	710	95	70	165
3. Falseema	50		116	97	213	4.26	830	75	61	136
Total Almora District	150		446	339	785	5.23	760	265	194	459
4. Arakota	50		119	116	235	4.70	970	83	70	153
5. Bada Sweeta	50		187	146	333	6.66	780	101	81	182
6. Manjud	50		181	181	362	7.24	1000	123	124	247
Total Tehri Garhwal District	150		487	443	930	6.20	910	307	275	582
Total Hill Region	300		933	782	1715	5.72	838	572	469	1041

Table 15 (contnd...)

Village	Total Dependents		Labour Participation Rate		Depend- ncy ratio
	Male	Female	Male	Female	
1. Deoli	73	63	0.57	0.50	0.86
2. Malgaon	67	46	0.53	0.60	0.63
3. Falseema	41	36	0.64	0.62	0.56
Total Almora District	181	145	0.59	0.57	0.71
4. Arakota	36	46	0.69	0.60	0.53
5. Bada Sweeta	86	65	0.54	0.55	0.82
6. Manjuda	50	57	0.67	0.63	0.46
Total Tehri Garhwal District	180	163	0.63	0.62	0.60
Total Hill Region	361	313	0.61	0.60	0.65

to 6.20 and the average size of households for the Hill region works out to 5.72. The sex ratio for Almora and Tehri Garhwal districts and for the Hill region respectively are 760, 910 and 838 females per 1000 males. The labour participation rate, i.e., the ratio of workers to population is 58 per cent for Almora district, 63 per cent for Tehri Garhwal and 61 per cent for Hill region taken as a whole. The male and female participation rates are almost equal, thus, it is revealed that females are almost equal to males in working and earning for the family. The ratio of dependents to total workers in the family, i.e., the dependency ratio is found to be 71 per cent in Almora district, 60 per cent in Tehri Garhwal district and 65 per cent for the Hill region taken as a whole.

2. Caste Composition of the Households

The data relating to the caste composition of the sample households is presented in Table 16 below. The data presented in the table indicates that higher castes generally predominate village-wise, district-wise and in the Hill region as a whole. Except for Falseema village in Almora district where the higher caste households constitute 44.00 per cent and the intermediate caste households dominate with 54.00 per cent households, in

Table 16

Caste Composition of the Households

Village	Higher Castes	Interme- diate Ca- stes	Scheduled Castes and Scheduled Tribes	Total
1. Deoli	33 (66.00)	14 (28.00)	3 (6.00)	50 (100.00)
2. Malgaon	46 (92.00)	4 (8.00)	-	50 (100.00)
3. Falseema	22 (44.00)	27 (54.00)	1 (2.00)	50 (100.00)
Total Almora District	101 (67.33)	45 (30.00)	4 (2.67)	150 (100.00)
4. Arakota	42 (84.00)	4 (8.00)	4 (8.00)	50 (100.00)
5. Bada Sweeta	43 (86.00)	-	7 (14.00)	50 (100.00)
6. Manjud	48 (96.00)	-	2 (4.00)	50 (100.00)
Total Tehri Garhwal Distt.	133 (88.67)	4 (2.67)	13 (8.66)	150 (100.00)
Total Hill Region	234 (78.00)	49 (16.33)	17 (5.67)	300 (100.00)

the other two villages in this district, the higher caste households constitute 66.00 per cent and 92.00 per cent and their average for the district is 67.33 per cent. The average for the intermediate caste households in the Almora district works out to 30.00 per cent. In the Tehri

Garhwal district, the percentage proportion of higher caste households varies between 84.00 to 96.00 and the average for the district is 88.67 per cent. The intermediate caste households are non-existent in the two of the three sample villages and their average for the district is 2.67 per cent. The Scheduled Castes/Tribes households proportion varies between 2.00 to 6.00 per cent in two of the three villages in Almora district, their average in the district being 2.67 per cent, while in Tehri Garhwal district, their percentage proportion varies between 4.00 to 14.00 in the three sample villages, while their average in the district is 8.66 per cent. Taking the Hill region as a whole, the higher caste households constitute 78.00 per cent, the intermediate castes constitute 16.33 per cent and the scheduled castes/tribes households are 5.67 per cent.

3. Educational Level

The data presented in Table 17 indicate the level of education and its pattern. Those having some education as a proportion of total population varied between about 33.00 per cent to about 59.00 per cent, the average for the Almora district being 47.52 per cent. The district

Table 17

The Population of Sample Households by Level of Education

Village	Total Population	Total with some edu- cation	Number of persons' by level of Education			
			Literate	Primary	Secondary	Graduate
1. Deoli	294 (100.00)	140 (47.61)	53 (18.02)	67 (22.78)	16 (5.44)	4 (1.36)
2. Malgaon	278 (100.00)	163 (58.63)	43 (15.46)	77 (27.69)	38 (13.66)	5 (1.79)
3. Falseema	213 (100.00)	70 (32.86)	22 (10.33)	33 (15.69)	14 (6.57)	1 (0.47)
Total Almora District	785 (100.00)	373 (47.52)	118 (15.03)	177 (22.55)	68 (8.66)	10 (1.27)
4. Arakota	235 (100.00)	108 (45.96)	53 (22.55)	37 (15.74)	15 (6.38)	3 (1.28)
5. Bada Sweeta	333 (100.00)	218 (65.47)	85 (25.52)	81 (24.32)	47 (14.11)	5 (1.50)
6. Manjud	362 (100.00)	162 (44.75)	74 (29.96)	67 (27.13)	18 (7.29)	3 (1.21)
Total Tehri Garhwal District	930 (100.00)	488 (52.47)	212 (26.01)	185 (22.70)	80 (9.82)	11 (1.35)
Total Hill Region	1715 (100.00)	861 (50.20)	330 (20.62)	362 (21.11)	148 (9.25)	21 (1.31)

average for those having education below primary was 15.03 per cent, those with education upto primary level were 22.55 per cent, with secondary level were 8.66 per cent and graduates were mere 1.27 per cent of the total population. In Tehri Garhwal, the proportion of those having some education varied from about 45.00 per cent to about 66.00 per cent of the total population the sample villages and for the district the corresponding percentage was about 52.00 per cent. The average proportion of population in the district of Tehri Garhwal with education below primary level was 26.00 per cent of the total population, about 23.00 per cent of them had it upto primary level, 10.00 per cent upto secondary level and mere 1.35 per cent were graduates. Taking the Hill region as a whole, those having some education worked out to 50.20 per cent of the total population. Some 20.62 per cent of the total population had education below primary level, 21.11 per cent upto primary level, 9.25 per cent upto secondary level and 1.31 per cent upto graduation level. In Table 18, the data relating to level and pattern of education by size and class of land holdings is presented. No definite relationship or general trend is, however, revealed from this data, except that those belonging to families having the smallest holding of

Table 18

Pattern of Education by Size of Holdings

Size of land- holdings (in acre)	ALMORA DISTRICT					
	Total popu- lation	Below Primary	Primary	Secondary	Graduate	Total
0	1	2	3	4	5	6
Below	202 (100.00)	34 (16.83)	39 (19.30)	13 (6.43)	-	86 (42.57)
0.25 - 0.49	286 (100.00)	34 (11.88)	60 (20.97)	27 (9.44)	4 (1.39)	125 (43.70)
0.50 - 0.99	149 (100.00)	28 (18.79)	52 (34.22)	19 (12.75)	3 (2.01)	101 (67.78)
1.00 - 1.99	111 (100.00)	18 (16.21)	20 (18.01)	5 (4.50)	3 (2.70)	46 (41.44)
2.00 - 3.99	30 (100.00)	4 (13.33)	5 (16.66)	4 (13.33)	-	13 (43.33)
4.00 - 4.99	7 (100.00)	-	1 (14.28)	-	-	1 (14.28)
5.00 +	-	-	-	-	-	-
Total	785 (100.00)	118 (15.03)	177 (22.42)	68 (8.66)	10 (1.27)	373 (47.38)

Table 18 (contnd...)

TEHRI GARHWAL DISTRICT						
Size of landholdings (in acre)	Total popu- lation	Below Primary	Primary	Secondary	Graduate	Total
0	7	8	9	10	11	12
Below 0.25	15 (100.00)	5 (33.33)	4 (26.67)	1 (6.67)	-	10 (66.67)
0.25 - 0.49	135 (100.00)	33 (24.44)	29 (21.48)	20 (14.81)	3 (2.22)	85 (62.96)
0.50 - 0.99	235 (100.00)	60 (25.53)	48 (20.42)	32 (13.62)	3 (1.28)	143 (60.85)
1.00 - 1.99	226 (100.00)	53 (23.45)	67 (29.64)	18 (7.96)	3 (1.33)	141 (62.39)
2.00 - 3.99	116 (100.00)	36 (31.03)	25 (21.55)	8 (6.90)	2 (1.72)	71 (61.21)
4.00 - 4.99	7 (100.00)	4 (57.14)	-	-	-	4 (57.14)
5.00 +	81 (100.00)	21 (25.93)	12 (14.81)	1 (1.23)	-	84 (41.98)
Total	930 (100.00)	212 (26.01)	185 (22.70)	80 (9.82)	11 (1.35)	488 (59.88)

Table 18 (contnd...)

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HILL REGION									
Size of landholdings (in acres)	Total Population	Below			Primary	Secondary	Graduate	Total	Percentage to total of Col. 18
		Primary	Primary	Below					
. 0	13	14	15	16	17	18	19		
Below 0.25	217 (100.00)	39 (17.97)	43 (19.81)	14 (6.45)	-	96 (44.23)	11.16		
0.25 - 0.49	421 (100.00)	67 (15.91)	89 (21.14)	47 (11.16)	78 (1.66)	210 (49.88)	24.42		
0.50 - 0.99	384 (100.00)	88 (22.91)	100 (25.78)	51 (13.28)	6 (1.56)	245 (63.54)	28.37		
1.00 - 1.99	337 (100.00)	71 (21.06)	87 (25.81)	23 (6.82)	6 (1.78)	187 (55.48)	21.74		
2.00 - 3.99	146 (100.00)	40 (27.39)	30 (20.54)	12 (8.21)	2 (1.36)	84 (57.53)	9.77		
4.00 - 4.99	14 (100.00)	4 (28.57)	1 (7.14)	-	-	5 (35.71)	0.58		
5.00 +	81 (100.00)	21 (25.92)	12 (14.81)	1 (1.23)	-	34 (41.97)	3.95		
Total	1715 (100.00)	330 (20.62)	362 (22.56)	148 (9.25)	21 (1.31)	861 (53.75)	100.00		

less than 0.25 acres have lesser ability to send their children for different levels of education and none can go upto graduation level compared to those with larger holding. It is also indicated that those with land holdings of 4.00 acres and above are less interested in sending their children for varying levels of education, in any case none upto graduation level. Thus, for example the percentage rigures given in the last column giving figures for total educated in each land holding size for the Hill region taken as a whole indicate that bulk of those taking some level of education are concentrated in the size classes of land holdings between 0.25 to 1.99 acres, thereafter the trend is one of general decline.

The data relating to pattern and level of education by castes is presented in Table 19. Out of the total population of district Almora, about 48.00 per cent have some level of education and nearly 52.00 per cent are, thus, illiterate. The corresponding percentages for the district Tehri Garhwal are 52.5 for those educated and 47.5 for illiterates. For Hill region as a whole, these percentages are 50.00 for both the categories of those with some education and the illiterates. The caste-wise distribution of those educated indicates that 52.62 per

Table 19

Pattern and Level of Education by Caste

Level of education	ALMORA DISTRICT				TEHRI GARHWAL DISTRICT			
	Higher castes	Interme- diate caste	SC/ST	Total	Higher castes	Interme- diate caste	SC/ST	Total
0	1	2	3	4	5	6	7	8
Below primary	83 70.34 (15.00)	33 27.97 (15.94)	2 1.69 (8.00)	118 100.00 (15.03)	199 93.87 (23.98)	6 2.83 (31.58)	7 3.30 (8.64)	212 100.00 (22.80)
Upto primary	142 8.23 (25.68)	32 18.08 (15.46)	3 1.69 (12.00)	177 100.00 (22.55)	166 89.73 (20.00)	3 1.62 (15.79)	16 8.65 (19.75)	185 100.00 (19.89)
Secondary	57 (83.82) (10.31)	11 16.18 (5.32)	-	68 100.00 (8.66)	76 95.00 (9.16)	-	4 5.00 (4.94)	80 100.00 (8.60)
Graduate	9 90.00 (1.63)	1 10.00 (0.48)	-	10 100.00 (1.28)	11 (100.00) (1.32)	-	-	11 100.00 (1.18)
Total with education	291 78.02 (52.62)	77 20.64 (37.20)	5 1.34 (20.00)	373 100.00 (47.52)	452 92.62 (54.46)	9 1.84 (47.37)	27 5.54 (33.33)	488 100.00 (52.47)
Without education	262 63.59 (47.38)	130 31.55 (62.80)	20 4.86 (80.00)	412 100.00 (52.48)	378 85.52 (45.54)	10 2.26 (52.63)	54 12.22 (66.67)	442 100.00 (47.53)
Total population	553 70.45 (100.00)	207 26.37 (100.00)	25 3.18 (100.00)	785 100.00 (100.00)	830 89.25 (100.00)	19 2.04 (100.00)	81 8.71 (100.00)	930 100.00 (100.00)

Table 19 (contnd...)

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Level of education	HILL REGION			
	Higher education	Interme- diate castes	SC/ST	Total
0	9	10	11	12
Below primary	282 85.45 (20.39)	39 11.82 (17.26)	9 2.73 (8.49)	330 100.00 (19.24)
Upto primary	308 85.08 (22.27)	35 9.67 (15.49)	19 5.25 (17.93)	362 100.00 (21.11)
Secondary	133 89.86 (9.62)	11 7.43 (4.87)	4 2.71 (3.77)	148 100.00 (8.63)
Graduate	20 95.24 (1.44)	1 4.76 (0.43)	-	21 100.00 (1.22)
Total with education	743 86.30 (53.72)	86 9.99 (38.05)	32 3.71 (30.19)	861 100.00 (50.20)
Without education	640 74.94 (46.28)	140 16.33 (61.95)	74 8.67 (69.81)	854 100.00 (49.80)
	1383 80.64 (100.00)	226 13.18 (100.00)	106 6.18 (100.00)	1715 100.00 (100.00)

standing of those belonging to the intermediate castes and the Scheduled Castes/Tribes. The picture, as it is, revealed for the Hill region in this regard is that 85.45 per cent of those having education below primary, 85.08 per cent of those having education upto primary, 89.86 per cent of those with secondary education and 95.24 per cent of the graduates belong to the higher castes. The corresponding percentages for these levels of education for those of the intermediate castes are 11.82, 9.67, 7.43 and 4.76 respectively. For the Scheduled Castes/Tribes, these percentages respectively are 2.73, 5.25, 2.71 for those below primary, upto primary and secondary levels and nil for the graduate level.

4. Land Holdings Pattern

The data relating to the number and area of land holding for the sample villages of Almora and Tehri Garhwal districts and the aggregated figures for the Hill region taken as a whole by size classes of holdings in acres are presented in Table 20. 82.00 per cent of the land holdings in Almora district, according to the data relating to Deoli, Malgaon and

Table 20

Number and Area of Landholdings by Size Class
(Area in acres)

ALMORA DISTRICT VILLAGES

Size class of landho- ldings (in acres)	Deoli		Malgaon		Falsceema	
	Number of holdings	Area	Number of holdings	Area	Number of holdings	Area
0	1	2	3	4	5	6
Less than 0.25	19 (38.00)	3.16 (12.17)	6 (12.00)	0.42 (1.45)	15 (30.00)	1.92 (5.10)
0.25 - 0.49	16 (32.00)	5.68 (21.87)	22 (44.00)	8.86 (30.76)	18 (36.00)	6.44 (17.21)
0.50 - 0.99	6 (12.00)	4.12 (15.87)	18 (36.00)	13.37 (46.42)	3 (6.00)	2.47 (6.66)
1.00 - 1.99	9 (18.00)	13.00 (50.09)	3 (6.00)	3.78 (13.12)	9 (18.00)	10.73 (28.68)
2.00 - 3.99	-	-	1 (2.00)	2.37 (8.25)	4 (8.00)	11.75 (31.40)
4.00 - 4.99	-	-	-	-	1 (2.00)	4.10 (10.95)
5.00 and above	-	-	-	-	-	-
Total	50 (100.00)	25.96 (100.00)	50 (100.00)	28.80 (100.00)	50 (100.00)	37.41 (100.00)

Table 20 (continued)

Size class of landholdings (in acres)	ALMORA DISTRICT				TEHRI GARHWAL DISTRICT VILLAGES			
	Number of holdings		Area		Arakota		Bara Sweeta	
	Number of holdings	Area	Number of holdings	Area	Number of holdings	Area	Number of holdings	Area
0	7	8	9	10	11	12		
Less than 0.25	40 (26.67)	5.50 (5.97)	1 (2.00)	0.10 (0.03)	2 (4.00)	0.35 (0.56)		
0.25 - 0.49	56 (37.33)	20.98 (22.76)	4 (8.00)	1.35 (1.01)	9 (18.00)	4.08 (6.55)		
0.50 - 0.99	27 (18.00)	19.96 (21.65)	10 (20.00)	7.46 (5.67)	15 (30.00)	12.85 (20.62)		
1.00 - 1.99	21 (14.00)	27.51 (29.85)	11 (22.00)	14.65 (11.12)	15 (30.00)	21.70 (34.82)		83
2.00 - 3.99	5 (3.33)	14.12 (15.32)	8 (16.00)	20.72 (15.73)	9 (18.00)	23.33 (37.44)		
4.00 - 4.99	1 (0.67)	4.10 (4.45)	2 (4.00)	8.10 (6.15)	-	-		
5.00 and above	-	-	14 (28.00)	79.35 (60.24)	-	-		
Total	150 (100.00)	92.17 (100.00)	50 (100.00)	131.73 (100.00)	50 (100.00)	62.31 (100.00)		

Table 20 (continued)

Size class of land- holdings (in acres)	TEHRI GARHWAL DISTRICT				HILL REGION	
	Manjud		Number of holdings	Area	Number of holdings	Area
	Number of holdings	Area				
0	13	14	15	16	17	18
Less than 0.25	-	-	3 (2.00)	0.45 (0.18)	43 (14.33)	5.95 (1.74)
0.25 - 0.49	10 (20.00)	4.14 (7.43)	23 (15.33)	9.57 (3.83)	79 (26.33)	30.55 (8.93)
0.50 - 0.99	17 (34.00)	12.43 (22.31)	42 (28.00)	32.74 (13.11)	69 (23.01)	52.70 (15.41)
1.00 - 1.99	17 (34.00)	22.67 (40.69)	43 (28.67)	59.02 (23.63)	64 (21.33)	86.53 (25.31)
2.00 - 3.99	6 (12.00)	16.47 (29.56)	23 (15.33)	60.52 (24.24)	28 (9.33)	74.64 (21.83)
4.00 - 4.99	-	-	2 (1.33)	8.10 (3.24)	3 (1.00)	12.20 (3.57)
5.00 and above	-	-	14 (9.34)	79.35 (31.77)	14 (4.67)	79.35 (23.21)
Total	50 (100.00)	55.71 (100.00)	150 (100.00)	249.75 (100.00)	300 (100.00)	341.92 (100.00)

Falseema, the three sample villages of this district, are below 1.00 acre and have 50.38 per cent of the land in their share. Another 18.00 per cent of the holdings between 1.00 to 4.99 acres have 40.62 per cent of the area as their share. There are no holdings in the size class of 5.00 acres and above. Thus, while the land holdings are in the category of marginal and small holdings, the pattern of land distribution is highly skewed. In Tehri Garhwal district, the aggregated data for the three sample villages Arakota, Bada Sweeta and Manjud, indicates that 46.33 per cent of the land holdings of less than 1.00 acre size command only 17.12 per cent of the land, while 45.33 per cent of the land holding in the size class between 1.00 to 4.99 acres share 51.11 per cent of land. There are another 9.34 per cent land holdings of 5.00 acres and above size which command 31.77 per cent of the land. The trend of land distribution is similarly skewed. Taking the Hill region as a whole, 63.67 per cent of the land holdings of below 1.00 acre size have 26.08 per cent of the land in their share, while another 31.66 per cent of the land holdings of between 1.00 to 4.99 acres size command 50.71 per cent of the land. Some 4.67 per cent

of the land holdings of 5.00 acres and above have 23.21 per cent of the land. Thus the pattern of land distribution is revealed to be inequitous along with being predominantly tiny holdings. Some 95.33 per cent of the land holdings belong to the marginal and small categories and have to their share 76.79 per cent land only, the remaining 23.21 per cent of land being commanded by only 4.67 holders of land.

Table 21 presents the data relating to caste-wise share in the land holdings by size of holdings for the sample districts of Almora and Tehri Garhwal and the Hill region as a whole. The caste composition of the sample households has been presented earlier in Table 16 and since every household has land as pointed out in study of sample villages in the earlier section, the share of castes in the number of holdings corresponds to the caste composition of holdings. In Almora district, while 15.84 per cent of higher caste households have land holdings below 0.25 acres, the percentage of households belonging to this size class of holdings is 53.33 per cent. But, as we move on to higher size classes of land holdings between 0.25 to 0.49 acres, 0.50 to 0.99 acre, 1.00 to 1.99 acres and 2.00 to 3.99 acres, the percentages of higher castes households is althrough higher compared to those of the intermediate castes in these size classes of land holdings, being for the two caste

Table 21

Households by Caste and Size of Holdings

Size class of land- holdings (in acres)	ALMORA DISTRICT				TEHRI GARHWAL DISTRICT			
	Higher Castes	Interme- diate castes	SC/ST	Total	Higher castes	Interme- diate castes	SC/ST	Total
1 0	1	2	3	4	5	6	7	8
Less than 0.25	16 40.00 (15.84)	24 60.00 (53.33)	-	40 100.00 (26.67)	3 100.00 (2.26)	-	-	3 100.00 (2.00)
0.25 - 0.49	39 69.64 (38.62)	16 28.56 (35.57)	1 25.00 (25.00)	56 100.00 (37.33)	21 91.30 (15.79)	-	2 8.70 (15.38)	23 100.00 (15.33)
0.50 - 0.99	25 92.60 (24.75)	2 7.40 (4.44)	-	27 100.00 (18.00)	40 95.24 (30.08)	-	2 4.76 (15.38)	42 100.00 (28.00)
1.00 - 1.99	17 76.48 (12.87)	2 11.76 (4.44)	2 50.00 (50.00)	21 100.00 (11.33)	41 95.35 (30.83)	-	2 4.65 (15.38)	43 100.00 (28.67)
2.00 - 3.99	4 88.88 (7.92)	1 11.12 (2.22)	-	5 100.00 (6.00)	18 78.26 (13.53)	-	5 21.74 (38.48)	23 100.00 (15.34)
4.00 - 4.99	-	-	-	-	1 50.00 (0.75)	1 50.00 (25.00)	-	2 100.00 (1.33)
5.00 and above	-	-	1 100.00 (25.00)	1 100.00 (0.67)	9 64.28 (6.76)	3 21.44 (75.00)	2 14.28 (15.38)	14 100.00 (9.33)
Total	101 67.33 (100.00)	45 30.00 (100.00)	4 2.67 (100.00)	150 100.00 (100.00)	133 88.67 (100.00)	4 2.67 (100.00)	13 8.66 (100.00)	150 100.00 (100.00)

Table 21 (continued)

Size class of landholdings (in acres)	HILL REGION			
	Higher castes	Interme- diate castes	SC/ST	Total
0	9	10	11	12
Less than 0.25	19 44.19 (8.12)	24 55.81 (48.98)	-	43 100.00 (14.33) 79
0.25 - 0.49	60 75.95 (25.64)	16 20.25 (32.66)	3 3.80 (17.65)	79 100.00 (26.33)
0.50 - 0.99	65 94.20 (27.78)	2 2.90 (4.08)	2 2.90 (11.76)	69 100.00 (23.00)
1.00 - 1.99	58 90.00 (23.08)	2 3.33 (4.08)	4 6.67 (23.53)	64 100.00 (20.00)
2.00 - 3.99	22 81.25 (11.11)	1 3.12 (2.04)	5 15.63 (29.41)	28 100.00 (10.67)
4.00 - 4.99	1 50.00 (0.42)	1 50.00 (2.04)	-	2 100.00 (0.67)
5.00 and above	9 60.00 (3.85)	3 20.00 (6.12)	3 20.00 (17.65)	15 100.00 (5.00)
Total	234 78.00 (100.00)	49 16.33 (100.00)	17 5.67 (100.00)	300 100.00 (100.00)

groups 38.62 and 35.57, 24.75 and 4.44, 12.87 and 4.44 and 7.92 and 2.22 for the afore mentioned size classes of holdings respectively. There are only four Scheduled Caste/Tribe households in this sample district - one being in 0.25 to 0.49 size class, two being in 1.00 to 1.99 size class and the remaining one being in 5.00 or more size group. In Tehri Garhwal district, there are only four intermediate caste households distributed in the size classes 4.0 to 4.99 and 5.00 and more acres. The thirteen Scheduled Caste/Tribe households are distributed in the size classes 0.25 to 0.49, 0.50 to 0.99, 1.00 to 1.99, 2.00 to 3.99 acres and two of their households being in 5.00 and more acres and two of their households being in 5.00 and more acres size classes. The higher castes households are mainly concentrated in the above mentioned four size classes, some 77.23 per cent of them being in these size classes. Their proportion is higher in each one of these size classes to that of the Scheduled Caste households. When we examine the aggregated figures for the Hill region in this regard, we find that while 8.12 per cent of higher caste households fall in the size class of below 0.25 acre, the proportion of intermediate caste households in this smallest size class is 48.98 per cent. While 87.61 per cent of higher caste households fall in the size classes of holdings of 0.25 to 0.49, 0.50 to 0.99, 1.00 to 1.99 and 2.00 to 3.99, the

percentage of households of intermediate castes in these size class holdings is 42.86. Of the seventeen Scheduled Caste/Tribe households, the bulk, fourteen households, i.e., 82.35 per cent of them fall in these size classes. One household each of the higher and intermediate castes falls in size class 4.00 to 4.99 acres holding and nine and three households respectively of these caste groups fall in the 5.00 and more acres size group. Three of the Scheduled Caste households also fall in this size class. As for the caste-wise share in the area of cultivated holdings, the relevant data is presented in Table 22. When we examine the caste-wise share in area of landholdings, the present sample study does not reveal any specific trend of land concentration in the hands of households belonging to any specific caste group. Earlier, in chapter II, however, while examining Agricultural Census 1985-86, it has been noted that Scheduled Castes/Tribes have less than proportionate share in land compared to their share in population.

5. Occupational Characteristics of the Sample Households

Most of the sample households own and cultivate certain patches of land for crop production in the sample districts of Almora and Tehri Garhwal in the Hill region. In this way, they appear to be cultivating households with dependence on

Table 22

Caste-wise Distribution of Land Area of Holdings

Land size	ALMORA DISTRICT									
	Higher Caste		Intermediate Caste		Scheduled Caste		Total		Number	Area
	Number	Area	Number	Area	Number	Area	Number	Area		
0	1	2	3	4	5	6	77	8		
Less than 0.25	16 (40.00)	2.36 (42.91)	24 (60.00)	3.14 (57.09)	-	-	40 (100.00)	5.50 (100.00)		
0.25 - 0.49	15.84 39 (69.64)	3.43 14.80 (70.55)	53.33 16 (28.57)	19.09 5.90 (28.12)	1 (1.79)	0.28 (1.33)	26.67 56 (100.00)	5.96 20.98 (100.00)		
0.50 - 0.99	33.62 25 (92.60)	21.53 13.23 (91.33)	35.57 2 (7.40)	35.71 1.73 (8.67)	25.00	4.06	37.33 27 (100.00)	22.76 19.96 (100.00)		
1.00 - 1.99	24.75 17 (80.96)	26.52 22.24 (30.85)	4.44 2 (9.52)	10.48 2.75 (9.95)	2 (9.52)	2.52 (9.16)	18.00 21 (100.00)	21.66 27.51 (100.00)		
2.00 - 3.99	16.83 4 (80.00)	32.35 11.12 (78.75)	4.44 1 (20.00)	16.65 3.00 (21.25)	50.00	36.52	11.33 5 (100.00)	29.85 14.12 (100.00)		
4.00 - 4.99	3.96 -	16.18 -	2.22 -	13.16 -	-	4.10 (100.00)	6.00 -	15.32 4.10 (100.00)		
5.00 and above	-	-	-	-	1 (100.00)	-	1 (100.00)	-		
					25.00	59.12	9.67	4.45		
Total	101 (67.33) 100.00	63.75 (74.59) 100.00	45 (30.00) 100.00	16.52 (17.92) 100.00	4 (2.67) 100.00	6.90 (7.49) 100.00	150 (100.00) 100.00	92.17 (100.00) 100.00		

Table 22 (continued)

Land size	TEHRİ GARHWAL DISTRICT										Total	
	Higher Caste		Intermediate Caste		Scheduled Caste		Scheduled Caste		Area		Number	Area
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
0	9	10	11	12	13	14	15	16				
Less than 0.25	3 (100.00) 2.26 21 (91.30) 15.79 40 (95.24) 30.12 (91.15) (95.35) 30.83 18 (78.26) 13.53 1 (50.00) 0.75 9 (64.28) 6.76	0.45 (100.00) 0.23 8.59 (89.76) 4.33 29.81 (94.43) 15.03 56.81 (96.22) 28.65 47.04 (77.73) 23.72 4.00 (49.38) 2.02 51.60 (65.03) 26.02	-	-	-	-	-	-	-	-	-	-
0.25 - 0.49					2 (8.70) 15.38 2 (4.76) 15.30 (2.23) (4.65) 15.38 5 (21.74) 38.48	0.98 (10.24) 3.31 1.74 (5.52) 5.37 2.23 (3.78) 7.53 13.48 (22.27) 45.49					3 (100.00) (100.00) 2.00 23 (100.00) (100.00) 15.33 42 (100.00) (100.00) 20.00 43 (100.00) (100.00) 28.67 23 (100.00) (100.00) 15.34 2 (100.00) (100.00) 1.33 14 (100.00) (100.00) 9.33 31.92	0.45 (100.00) 0.18 9.57 3.85 31.55 32.69 59.04 23.75 60.52 24.35 8.10
0.50 - 0.99												
1.00 - 1.99												
2.00 - 3.99												
4.00 - 4.99												
5.00 and above												
Total	133 (88.67) 100.00	198.30 (79.77) 100.00	4 (2.67) 100.00	20.65 (8.31) 100.00	13 (8.66) 100.00	29.63 (11.92) 100.00	150 (100.00) 100.00	248.58 (100.00) 100.00				

Table 22 (continued)

Land size	HILL REGION											
	Higher Caste			Intermediate Caste			Scheduled Castes			Total		
	Number	Area		Number	Area		Number	Area		Number	Area	
0	17	18		19	20	21	22	23	24			
Less than 0.25	19 (44.19) 8.12 60	2.81 (47.23) 1.52 23.39		24 (55.81) 48.97 16	3.14 (52.71) 8.45 5.90	-	-	43 (100.00) 14.33 79	5.95 (100.00) 1.75 30.55			
0.25 - 0.49	(75.95) 25.64 65	(76.56) 8.76 48.04		(20.25) 32.66 2	(19.31) 15.87 1.73	3 (3.80) 17.65 2	1.26 (4.13) 3.46 1.74	(100.00) 26.33 69	(100.00) 8.97 51.51			
0.50 - 0.99	(94.20) 27.78 58	(93.26) 17.99 79.05		(2.90) 4.08 2	(3.36) 4.65 2.75	(2.90) 11.76 4	(3.38) 4.76 4.75	(100.00) 23.00 64	(100.00) 15.12 86.55			
1.00 - 1.99	(90.62) 24.78 22	(91.33) 29.60 58.16		(3.13) 4.08 1	(3.18) 7.39 3.00	(6.25) 23.53 5	(5.49) 13.00 13.48	(100.00) 21.33 28	(100.00) 25.40 74.64			
2.00 - 3.99	(78.57) 9.40 1	(77.92) 21.78 4.00		(3.57) 2.04 1	(4.02) 8.08 4.10	(17.86) 29.41 -	(18.06) 36.90 4.10	(100.00) 9.33 2	(100.00) 21.90 12.20			
4.00 - 4.99	(50.00) 0.43 9	(32.78) 1.50 51.60		(50.00) 2.04 3	(33.61) 11.03 16.55	-	(33.61) 11.22 11.20	(100.00) 0.63 15	(100.00) 3.58 79.35			
5.00 and above	(60.00) 3.85	(65.03) 19.32		(20.00) 6.13	(20.86) 44.53	(20.00) 17.65	(14.11) 30.66	(100.00) 5.00	(100.00) 23.28			
Total	234 (78.00) 100.00	267.05 (78.37) 100.00		49 (16.33) 100.00	37.17 (10.91) 100.00	17 (5.67) 100.00	36.53 (10.72) 100.00	300 (100.00) 100.00	340.75 (100.00) 100.00			

agriculture as the basic source of occupation and livelihood for them. But the fact is that these households do not depend only on agriculture but on some other activities like non-agricultural labour, service, etc. for their subsistence. They own and cultivate land facing all kinds of natural hazards and constraints because they have to produce, whatever possible, for meeting some of the basic food requirements for subsistence.

The occupational classification of the sample households based on income criterion shows that 7.33 per cent and about 15 per cent of the total households belonging to Almora and Tehri Garhwal districts respectively are cultivators; and 11 per cent of the total households in both districts taken together are cultivators in the Hill region. These households in the districts derive more than 50 per cent of their total income from agriculture. Table 23 indicates that about 59 per cent of the total households in Almora, 52 per cent of the total households in Tehri Garhwal, and 55.33 per cent of the total households in both districts taken together are non-agricultural households; because they derive more than half of their total income from non-agricultural wage employment. In other words, more than half of the households in the Hill districts depend on

Table 23

Occupational Distribution of Households

Activity-wise Household Groups	Almora	Tehri Garhwal	Both combined
1. Cultivator	7.33	14.65	11.00
2. Agricultural Labour	3.33	4.65	4.00
3. Non-Agricultural Labour	58.68	52.00	55.33
4. Artisan	4.00	6.00	4.67
5. Petty Trade	7.33	7.33	7.33
6. Service	15.33	10.00	12.67
7. Pension	3.33	6.00	4.67
8. Animal Husbandry	0.67	-	0.33
9. All	100.00	100.00	100.00

non-agricultural wage employment for subsistence. Agricultural wage employment is the major source of dependence for 3.33 per cent, about 5.00 per cent and 4.00 per cent of the total households belonging to Almora, Tehri Garhwal and both taken together respectively.

Next to non-agricultural activity is the services from which 15.33 per cent of the total households in Almora and about 10.00 per cent of the total households in Tehri Garhwal receive more than 50.00 per cent of their total income from their family members working in the government sector and other organisations. In this way, about 13 per cent of the total households in both districts taken together

depend on the tertiary activities. There are 7.33 per cent of the total households in each district which depend on petty trade like small tea stall or small Kirana Dukan (shop) in the hill areas. Pension is the major source of livelihood for 3.33 per cent of the total households in Almora, 6.00 per cent of the total households in Tehri Garhwal and about 5.00 per cent of the total households in both districts taken together. Animal husbandry is the major source of occupation and livelihood for only one household in Almora district.

The activity-wise distribution of the sample households, thus, shows that despite some land owned and cultivated by most of the households, agriculture is not a major source of occupation, employment and livelihood for the rural households in the hill areas. Non-agricultural wage employment and the services are the major sources of occupation, employment and livelihood for 68.00 per cent of the total households in the hill areas.

CHAPTER IV

EMPLOYMENT, EARNINGS AND CONSUMPTION

The purpose of this chapter is to discuss the pattern of employment, earnings and consumption for the sample households in the context of U.P.'s hill areas. It has been mentioned in an earlier chapter that for the purposes of our intensive household study, we had drawn a sample of fifty households each from the three villages in Almora district and fifty households each from the three villages in Tehri Garhwal district. We had, thus a total sample of three hundred households from the Hill region, one hundred fifty each from Almora and Tehri Garhwal in the Kumaon and Garhwal Divisions respectively.

I

PATTERN OF EMPLOYMENT

The activity-wise distributional pattern of the households based on the income criterion, as presented in a Table of the third chapter, shows that 55.33 per cent of the total households in the Hill region are engaged in non-agricultural labour; 12.67 per cent are in 'service', 11 per cent are in 'cultivation', 7.33 per cent are in 'petty trade', 4.67 per cent are 'pensioners', 4 per cent are in 'agricultural labour' and 0.33 per cent are in 'animal husbandry'. But

the activity-wise pattern of employment in terms of persons engaged in different activities presents a different picture from what is found in the distribution pattern of households based on the income generating classification of their households.

There were a total of 1041 workers in these sample households in the Hill region, there being 459 workers in Almora district and 582 workers in Tehri Garhwal. The sex-wise distribution of these workers was 265 males and 194 females in Almora district, 306 males and 276 females in the Hill region as a whole. The data relating to distribution of these workers by type of activity they were engaged in for their livelihood is presented in Table 24. Bulk of the workers are cultivators, working on their own farms. Some 50.33 per cent of the total workers in Almora district, 58.08 per cent in Tehri Garhwal district and 54.66 per cent in the Hill region are cultivators. But the bulk of the labour force working as cultivators are women; their percentage in Almora district being 37.25 per cent of the total rural labour force, 88.14 per cent of the total female rural workers and 74.03 per cent of the total labour force engaged in cultivation. In district Tehri Garhwal, the corresponding percentages of women workers to total rural labour force, to

Table 24

Pattern of Employment of Rural Labour Force

Village	CULTIVATORS				AGRICULTURAL LABOURERS				NON-AGRICULTURAL LABOURERS			
	Male	Female	Total		Male	Female	Total		Male	Female	Total	
0	1	2	3		4	5	6		7	8	9	
1. Deoli	13 (13.68)	54 (85.71)	67 (42.41)		1 (1.05)	5 (7.94)	6 (3.80)		59 (62.11)	1 (1.59)	60 (37.97)	
2. Malgaon	20 (21.05)	64 (91.43)	84 (50.91)		1 (1.05)	4 (5.71)	5 (3.03)		50 (52.63)	1 (1.43)	51 (30.91)	
3. Falseema	27 (36.00)	53 (86.88)	80 (58.22)		2 (2.66)	-	2 (1.47)		22 (29.36)	-	22 (16.18)	
Total Almo- ra Distt.	60 (22.64)	171 (88.14)	231 (50.33)		4 (1.51)	9 (4.64)	13 (2.83)		131 (49.43)	2 (1.03)	133 (28.98)	
4. Arakota	21 (25.61)	68 (95.77)	89 (58.17)		3 (3.66)	2 (2.82)	5 (3.27)		25 (30.49)	-	25 (16.34)	
5. Bada Sweeta	26 (25.74)	78 (96.31)	104 (57.14)		1 (0.99)	1 (1.23)	2 (1.10)		51 (50.50)	1 (1.23)	52 (28.57)	
6. Manjud	46 (37.40)	99 (79.84)	145 (58.70)		5 (4.07)	1 (0.81)	6 (2.43)		31 (25.20)	-	31 (12.55)	
Total Tehri Garhwal Distt.	93 (30.39)	245 (88.79)	338 (58.70)		9 (2.94)	4 (1.15)	13 (2.23)		107 (34.97)	1 (0.36)	108 (18.56)	
TOTAL HILL REGION	153 (26.80)	416 (88.51)	569 (54.66)		13 (2.28)	13 (2.77)	26 (2.50)		238 (41.68)	3 (0.64)	241 (23.15)	

Table 24 (continued)

	ARTISANS				PETTY TRADE				ANIMAL HUSBANDRY			
	Male		Female		Male		Female		Male		Female	
	10	11	12	13	14	15	16	17	18	19	20	21
0	0	-	-	-	-	-	-	-	-	-	-	-
1. Deoli	6 (6.32)	-	6 (3.80)	4 (4.21)	-	4 (2.53)	2 (2.11)	3 (4.76)	5 (3.19)	-	-	-
2. Malgaon	-	-	-	8 (8.43)	-	8 (4.85)	-	1 (1.43)	1 (0.61)	-	-	-
3. Falseema	4 (5.33)	-	4 (2.94)	5 (6.66)	-	5 (3.67)	6 (8.00)	8 (13.12)	14 (10.31)	-	-	-
Total Almora District	10 (3.77)	-	10 (2.18)	17 (6.42)	-	17 (3.70)	8 (3.02)	12 (6.19)	20 (4.30)	-	-	-
4. Arakota	5 (6.10)	-	5 (3.27)	4 (4.88)	-	4 (2.61)	11 (13.41)	1 (1.41)	12 (7.84)	-	-	-
5. Bada Sweeta	2 (1.98)	-	2 (1.10)	3 (2.97)	-	3 (1.65)	-	1 (1.23)	1 (0.55)	-	-	-
6. Manjud	5 (4.07)	-	5 (2.02)	8 (6.50)	-	8 (3.24)	11 (8.94)	24 (19.35)	35 (14.17)	-	-	-
Total Tehri Garhwal Distt.	12 (3.92)	-	12 (2.06)	15 (4.90)	-	15 (2.58)	22 (7.19)	26 (9.42)	48 (8.25)	-	-	-
Total Hill Region	22 (3.85)	-	22 (2.11)	32 (5.60)	-	32 (3.07)	30 (5.25)	38 (8.09)	68 (6.53)	-	-	-

Table 24 (continued)

Village	SERVICE				PENSIONERS				TOTAL	
	Male		Female		Male		Female		Male	
	19	20	21	22	23	24	25	26	27	27
0	19	20	21	22	23	24	25	26	27	27
1. Deoli	9 (9.47)	-	9 (5.70)	1 (1.05)	-	1 (0.68)	95 (100.0)	63 (100.0)	158 (100.00)	
2. Malgaon	12 (12.63)	-	12 (7.27)	4 (4.21)	-	4 (2.41)	95 (100.0)	70 (100.0)	165 (100.00)	
3. Falseema	5 (6.66)	-	5 (3.67)	4 (5.33)	-	4 (2.94)	75 (100.0)	61 (100.0)	136 (100.00)	
Total Almora District	26 (9.81)	-	26 (5.66)	9 (3.40)	-	9 (1.96)	265 (100.00)	194 (100.0)	459 (100.00)	
4. Arakota	7 (8.54)	-	7 (4.58)	6 (7.32)	-	6 (3.92)	82 (100.0)	71 (100.0)	153 (100.00)	
5. Bada Sweeta	14 (13.86)	-	14 (7.69)	4 (3.96)	-	4 (2.20)	101 (100.0)	81 (100.0)	182 (100.00)	
6. Manjud	10 (8.13)	-	10 (4.05)	7 (5.69)	-	7 (2.83)	123 (100.0)	124 (100.0)	247 (100.00)	
Total Tehri Garhwal Distt.	31 (10.13)	-	31 (5.33)	17 (5.56)	-	17 (2.92)	306 (100.0)	276 (100.0)	582 (100.0)	
Total Hill Region	57 (9.98)	-	57 (5.48)	26 (4.55)	-	26 (2.50)	571 (100.0)	470 (100.0)	1041 (100.0)	

total female work force and to total work force engaged in cultivation respectively is 42.10 per cent, 88.79 per cent and 72.49 per cent. Taking the Hill region as a whole, the percentage proportion of women workers in the total rural labour force is 40.00 per cent, to total female work force is 88.51 per cent and to total work force engaged in cultivation is 73.11 per cent. The rural work force working for wages on others' farms, i.e., as agricultural labour is negligible, a mere 2.83 per cent of the total in Almora district, 2.23 per cent in Tehri Garhwal district and 2.50 per cent in the Hill region taken as a whole.¹ This, as reported earlier, is mainly because, the landholdings with the households and operating them in given natural conditions, is too tiny and viable to require or afford hired labour; the proportion of males and females among agricultural labourers is 50:50. This state of affairs may be considered to be typical of the vast rural hinterland of the Hill region, barring the Terai and Bhabhar region of Nainital and Dehradun districts where big modern mechanised farms and fruit-cultivating gardens (horticulture) have developed in a big way. The next largest group of rural labour force, some 23.15 per cent of the total is engaged in wage-work outside agricultural sector. Bulk of them constituting 98.76 per cent are male workers and only 1.24 per cent of them are female workers. Of the total female rural labour,

1. This picture is typical of vast interior of the Hill Region. An earlier study of 1976-77 based on a sample from Nainital District where Large-scale commercial farming and horticulture predominates, the proportion of Rural Wage-Labour Households in total Rural Households is revealed to be high at 48.70 per cent, with 60.00 per cent of them being landless, and about 29.00 per cent of the total being Agricultural labour households. (See F.D. Shrivastava: op.cit.)

only 0.64 per cent engaged in such non-agricultural labour are women, while male workers are 41.68 per cent of the total male work force and 22.86 per cent of the total rural labour force in this type of activity. Female workers are totally absent among artisans, petty trade, services and pensioners; only male labour is engaged in these activities. Some 3.85 per cent of total male workers and 2.11 per cent total labour are artisans, 5.60 per cent of male workers and 3.07 per cent of the total labour are engaged in petty trade, 9.98 per cent of males and 5.48 per cent of total labour is engaged in services and 4.55 per cent of males and 2.50 per cent of total are pensioners. Animal husbandry is also a significant sector which attracts 6.53 per cent of the total labour force, 5.25 per cent of the total male work force and 8.09 per cent of the total female work force. The proportion of female workers in the total work force engaged in animal husbandry is high at 55.88 per cent.

The Average Days of Employment

The preceding section gave an idea of the pattern of employment of the rural labour force in the Hill region on the basis of the intensive study of the sample households in the selected villages from the two sample districts of Almora and Tehri Garhwal. Table 25 presents the data relating to average

Table 25

Average Number of Days of Availability of Employment

Village	CULTIVATORS			AGRICULTURAL LABOURERS			NON-AGRICULTURAL LABOURERS		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
	1	2	3	4	5	6	7	8	9
0									
1. Deoli	196.92	165.39	171.49	60.00	107.40	99.50	186.37	180.00	186.27
2. Malgaon	114.38	142.81	137.13	60.00	41.25	45.00	169.74	120.00	168.71
3. Falseema	197.04	231.32	219.75	190.00	-	190.00	224.09	-	224.09
Almora Distt.	173.39	177.39	176.40	75.00	78.00	92.46	186.67	150.00	186.11
4. Arakota	236.67	232.75	233.67	201.67	195.00	199.00	279.60	-	279.60
5. Bada Sweeta	138.89	132.82	143.38	30.00	30.00	30.00	155.17	150.00	155.07
6. Manjud	236.38	190.10	205.31	189.00	210.00	192.50	298.33	-	298.33
7.									
Tehri Garhwal District	208.74	184.59	191.39	176.67	157.50	170.77	223.74	150.00	223.06
HILL REGION	295.63	181.61	185.36	145.38	102.46	123.92	203.64	150.00	202.96

Table 25 (continued)

Village	ARTISANS			ANIMAL HUSBANDRY				SERVICE		
	Male		Female Total	Male	Female	Total	Total	Male	Female	Total
	10	11	12	13	14	15	16	17	18	
0										
1. Deoli	161.67	-	161.67	210.00	140.00	168.00	328.00	-	-	328.00
2. Malgaon	-	-	-	-	180.00	180.00	356.67	-	-	356.67
3. Falseema	305.00	-	305.00	255.00	225.00	237.36	280.00	-	-	280.00
Almora Distt.	219.00	-	219.00	253.75	200.00	221.50	331.85	-	-	331.85
4. Arakota	322.00	-	322.00	282.73	-	282.73	315.70	-	-	315.70
5. Bada Sweeta	186.67	-	186.67	-	200.00	200.00	360.67	-	-	360.67
6. Manjud	352.00	-	352.00	295.45	270.00	278.24	269.50	-	-	269.50
Tehri Garhwal District	302.31	-	302.31	289.09	266.80	277.23	322.34	-	-	322.34
HILL REGION	266.09	-	266.09	279.67	245.14	260.60	326.69	-	-	326.69

Table 25 (continued)

Village	PETTY TRADE			T O T A L		
	Male	Female	Total	Male	Female	Total
0	19	20	21	22	23	24
1. Deoli	276.25	-	276.25	204.12	159.79	106.44
2. Malgaon	244.13	-	244.13	139.42	137.21	165.85
3. Falseema	346.00	-	346.00	232.54	230.49	231.59
Almora District	281.65	-	281.65	207.56	173.88	192.97
4. Arakota	323.75	-	323.75	273.55	235.35	255.10
5. Bada Sweeta	271.33	-	271.33	184.20	132.59	161.36
6. Manjud	322.50	-	322.50	269.83	205.58	237.16
Tehri Garhwal District	325.93	-	325.93	241.08	191.62	217.31
HILL REGION	296.16	-	296.16	226.43	184.24	206.94

number of days of work for different occupational groups. The work is not usually available to rural labour for all the days in the year. On an average, the number of days in a year that the work is available to rural labour is about 193 days in Almora district, 217 days in Tehri Garhwal district and 207 days in the Hill region taken as a whole. The availability of work varies for male and female labour force; the average number of days of work for male and female labour respectively is 208 and 174 days in Almora, 241 and 192 days in Tehri Garhwal and 226 and 184 days in the Hill region. The work availability is greatest in service, where it is 332 days in Almora, 322 days in Tehri Garhwal and 327 days in the Hill region. In petty trade, the number of days during which the rural labour is reported to be gainfully engaged on an average in a year is 282 days in Almora, 326 days in Tehri Garhwal and 296 days in the Hill region as a whole. But it has to be noted that in these three sectors, viz., services, trade and craft (artisans) work is only available to male workers; female labour is not found to be having access in these fields of work. In non-agricultural wage-employment too, the female labour is negligible; the average number of days of availability of work

in this sector is 203 days and 150 days in the Hill region to the few female workers who get work. In animal husbandry, the average number of days of work in the Hill region is 261 days, being 280 days for male workers and 245 days for female workers. To agricultural labourers, the average number of days of availability of work in Hill region is 124 days, 145 days for male workers and 102 days for female workers. In cultivation, the average number of days of work in the Hill region is 185 days being 296 days for male workers and 182 days for female workers. The work availability varies in the two districts substantially, being 176 days in Almora and 191 days in Tehri Garhwal for cultivators, 92 days in Almora and 171 days in Tehri Garhwal for agricultural labourers, 186 days in Almora and 223 days in Tehri Garhwal for non-agricultural labour, 219 days in Almora and 302 days in Tehri Garhwal for artisans, and 222 days in Almora and 277 days in Tehri Garhwal for those engaged in Animal husbandry.

II

PATTERN OF EARNINGS

The data relating to total annual earnings by size class of landholdings, as well as, average per household, per person and per worker annual earnings is presented in Table 26. The

Table 26

Annual Earnings-Total, Per Household, Per Capita and Per Worker
in Hill Region

(In Rs. at current Prices)

Land size classes (Acres)	Total number of house- holds	Total popula- tion	Total worker- s	Total annual earn- ings	Earnings per house- hold	Per capita earnings	Per worker earnings	Average per day per person earnings
Less than 0.25	43 (14.33)	217 (12.65)	131 (12.53)	3,40,975 (11.07)	7,929.65	1,571.31	2,602.86	4.30
0.25 - 0.49	79 (26.33)	449 (26.18)	256 (24.59)	7,35,341 (23.90)	9,320.77	1,639.96	2,876.33	4.49
0.50 - 0.99	69 (23.00)	432 (25.20)	244 (23.44)	7,59,696 (24.66)	11,010.09	1,758.56	3,113.51	4.82
1.00 - 1.99	64 (21.33)	365 (21.28)	238 (22.86)	6,75,241 (21.92)	10,550.64	1,849.98	2,837.15	5.07
2.00 - 3.99	28 (9.33)	157 (9.15)	109 (10.47)	3,43,984 (11.16)	12,205.14	2,190.98	3,155.82	6.00
4.00 - 4.99	3 (1.00)	14 (0.82)	11 (1.06)	48,850 (1.59)	16,283.33	3,489.29	4,440.91	9.56
5.00 & more	14 (4.68)	81 (4.72)	52 (5.00)	1,75,598 (5.70)	12,542.71	2,167.88	3,376.83	5.94
Total	300 (100.0)	1,715 (100.0)	1,041 (100.0)	30,80,685 (100.0)	10,268.95	1,796.32	2,959.35	4.92

average annual earnings per household for the Hill region taken as a whole are Rs.10,268.95. While these are lowest for the households in the landholding size group below 0.25 acre, being Rs.7,929.65, they are found to be rising with each rising size class, being highest at Rs.16,283.33 for the households in the landholdings size group of 4.00 to 4.99 acres. They are lower at Rs.12,542.71 for the households in the landholding size group of 5.00 acres and more. The average per person and per worker annual earnings for the Hill region are Rs.1,796.32 and Rs.2,959.25 respectively. The average per day per person earnings for the Hill region are a mere Rs.4.92 and vary between Rs.4.30 and 9.56 for different landholdings size groups. The trend of the level of these too by size class of landholdings is the same as that for average per household earnings being lowest at Rs.1,571.31 and Rs.2,602.86 respectively for the smallest landholding size group of less than 0.25 acre and highest at Rs.3,489.29 and Rs.4,440.91 respectively for the landholding size class of 4.00-4.99 acres; thereafter, it too shows a decline to Rs.2,167.88 and Rs.3,376.88 respectively for the landholding size group of 5.00 acres or more. Thus the efficiency and productivity of the workers belonging to the households in the landholding size group of 4.00-4.99 acres is shown to be at its peak. The data in this table also reveals a certain degree of inequity in the pattern of distribution of the earnings. The share in the total annual earnings is less than proportionate to their proportion in the total number of households and population in the first two

smallest landholding size class of less than 0.25 acre and 0.25-0.99 acre. It is more than proportionate in the case of households and population belonging to landholding size groups of 2.00-3.99 acres, 4.00-4.99 acres and 5.00 acres and more. The case-wise distribution of annual earnings are indicated by data in Table 27. The data indicates that those belonging

Table 27

Case-wise Distribution of Total and Per Person
Annual Earnings in the Hill Region

(In Rs. at current prices)

Castes	Total popula- tion	Total annual earnings	Per capita earnings	Average per day per person ear- nings
Higher Castes	1,383 (80.64)	25,21,170 (81.84)	1,822.97	4.99
Intermediate Castes	226 (13.18)	3,29,970 (10.71)	1,460.04	4.00
Scheduled Castes & Tribes	106 (6.18)	2,29,545 (7.45)	2,165.52	5.93
Total	1,715 (100.00)	30,80,685 (100.00)	1,796.32	4.92

to Scheduled Castes/Tribes have highest level of per capita

annual earnings at Rs.2,165.52, while those belonging to the intermediate castes have the lowest per capita annual earnings at Rs.1,460.04. The intermediate castes also have a less than proportionate share in total annual earnings compared to their proportion in the total population while those belonging to the Scheduled Castes/Tribes have more than proportionate share in the total earnings. Those belonging to the higher castes too have more than proportionate share in the total annual earnings compared to their proportion in total population; their per capita earnings are, however, lower compared to those of the Scheduled Castes/Tribes, but higher compared to those of the intermediate castes, being at Rs.1,822.97. The enigma of higher per capita earnings and more than proportionate share in total earnings for the households belonging to Scheduled Castes/Tribes is resolved by the data relating to source-wise pattern of earnings presented in the following section. It reveals that even though they are least represented in the services and have negligible income from that source, they are hard-working and good artisans, because of which their major source of earnings are from crafts (as artisans), non-agricultural labour, cultivation, petty trade and animal husbandry.

Source-wise Pattern of Earnings

The data relating to source-wise percentage distribution and per worker annual earnings is presented in Table 28. The

Table 28

Source-wise Percentage Distribution and Per Worker Annual Income (In Rs.)

Village	TYPE OF ACTIVITY AND SOURCE OF INCOME								
	Cultivation			Agricultural Labour			Non-agricultural Labour		
	Number of workers	Income	Percentage to total income	Number of workers	Income	Percentage to total income	Number of workers	Income	Percentage to total income
0	1	2	3	4	5	6	7	8	9
1. Deoli	67	66689 (995.36)	12.59	6	21760 (3626.67)	(4.11)	60	195200 (3253.33)	(36.86)
2. Malgaon	84	76241 (907.63)	16.83	5	9530 (1906.00)	2.10	51	152916 (2993.35)	33.76
3. Falseema	80	81415 (1017.69)	17.07	2	22300 (11150.00)	4.68	22	208935 (9497.05)	43.82
Total Almora District	231	224345 (971.19)	15.37	13	53590 (4122.31)	3.67	133	557051 (4188.35)	38.17
4. Arakota	89	147670 (1659.21)	26.87	5	37725 (7545.00)	6.87	25	202840 (8113.60)	36.91
5. Bada Sweeta	104	143968 (1384.31)	28.37	2	4410 (2205.00)	0.86	52	203110 (3905.96)	40.02
6. Manjud	145	81368 (561.16)	14.42	6	35745 (5957.50)	6.73	31	264440 (8530.32)	46.86
Total Tehri District	338	373006 (1103.57)	23.01	13	77890 (5990.77)	4.80	108	670390 (6207.31)	41.35
Total Hill Region	569	597351 (1049.83)	19.39	26	131470 (5056.54)	4.27	241	1227441 (5093.12)	39.84

Note: Figures within brackets indicate per worker income by that source.

Table 23 (continued)

Village	TYPE OF ACTIVITY AND SOURCE OF INCOME									
	Artisans			Petty Trade			Animal Husbandry			
	Number of workers	Income	Perce- ntage to total income	Number of workers	Income	Perce- ntage to total income	Number of workers	Income	Perce- ntage to total income	
0	10	11	12	13	14	15	16	17	18	
1. Deoli	6	19600 (3266.67)	3.70	4	41280 (10320.00)	7.80	5	14030 (2806.00)	2.65	
2. Malgaon	-	-	-	8	60220 (7527.50)	13.30	1	11220 (11220.00)	2.49	
3. Falseema	4	47600 (11900.00)	9.98	5	19100 (3320.00)	4.01	14	7943 (567.36)	1.67	
Total Almora District	10	67200 (6720.00)	4.60	17	120600 (7094.12)	8.26	20	33193 (1659.65)	2.27	
4. Arakota	5	41000 (8200.00)	7.46	4	18800 (4700.00)	3.42	12	21383 (1781.92)	3.89	
5. Bada Sweeta	2	10800 (5400.00)	2.13	3	31450 (10483.33)	6.20	1	5180 (5180.00)	1.02	
6. Manjud	5	28600 (5720.00)	5.07	8	39750 (4968.75)	7.04	35	33217 (949.06)	5.89	
Total Tehri Garhwal Dist.	12	80400 (6700.00)	4.96	15	90000 (6000.00)	5.55	48	59780 (1245.42)	3.69	
Total Hill Region	22	147600 (6709.09)	4.79	32	210600 (6581.25)	6.84	68	92973 (1367.25)	3.02	

average per worker earnings in Almora district as worked out from the data pertaining to sample households are found to be Rs.3,179.37 and for Tehri Garhwal district it is Rs.2,785.84. The figure for the Hill region as a whole is Rs.2,959.35. The ranking of the sources of annual earnings by their percentage contribution to the rural households' annual earnings and by per worker annual earnings for the districts Almora and Tehri Garhwal and for the Hill region is indicated in Table 29. A perusal of the data presented in Table 28 and 29 relating to percentage distribution of annual earnings by source, source-wise per worker annual earnings and ranking of the source of annual earnings both by the percentage contribution of the source to the total household earnings in a Year and by the level of per worker annual earnings indicates that 'Non-agricultural Labour' ranks first as the main source of earnings. 'Cultivation' and 'Service' follow as second and third ranking sources. Next in order as a source of earning are the 'Petty Trade' and Pension' ranking fourth or fifth. 'Art and craft' ranks sixth and 'Agricultural Labour' and 'Animal Husbandry' follow as seventh and eighth in rank as source of annual household earnings. Examining the various source from the point of view of the productivity of labour or level of per worker annual earnings, we find service and pensions (which too are the remuneration of retired persons in the services)

Table 29

Ranking of Sources of Annual Earnings
(Earnings in Rs.)

Sources	DISTRICTS				HILL REGION			
	Almora		Tehri Garhwal		Percentage distribution		Per worker earnings	
	Percentage distribution	Per worker earnings	Percentage distribution	Per worker earnings	Percentage distribution	Per worker earnings	Percentage distribution	Per worker earnings
Cultivation	15.37 (3)	971.19 (2)	23.01 (2)	1103.57 (8)	19.39 (2)	1049.83 (8)		
Agricultural labour	3.67 (7)	4122.31 (6)	4.80 (7)	5990.77 (5)	4.27 (7)	5056.54 (6)		
Non-agricultural labour	38.17 (1)	4188.35 (5)	41.35 (1)	6207.31 (2)	39.84 (1)	5093.12 (5)		
Arts & craft	4.60 (6)	6720.00 (4)	4.96 (6)	6700.00 (1)	4.79 (6)	6709.09 (3)		
Petty trade	8.26 (4)	7094.12 (3)	5.55 (5)	6000.00 (4)	6.84 (4)	6581.25 (4)		
Animal husbandry	2.27 (8)	1659.65 (7)	3.69 (8)	1245.42 (7)	3.02 (8)	1367.25 (7)		
Service	22.62 (2)	12698.08 (1)	10.31 (3)	5393.55 (6)	16.14 (3)	87525.44 (1)		
Pension	5.02 (5)	8133.33 (2)	6.33 (4)	6041.18 (3)	5.71 (5)	6765.38 (2)		

Note : Figures within brackets indicate ranking order of the source of annual earnings.

to be most remunerative. 'Art and Craft', 'Petty Trade' and 'Non-agricultural Labour' follow as third, fourth and fifth in ranking. Next in rank are the 'Agricultural Labour' and 'Animal Husbandry' as sixth and seventh. The least remunerative is 'Cultivation', with patchy landholdings and very weak infrastructural support. No wonder then, that 'Service' is most attractive as the remunerative avenue of employment and earning and cultivation, though being least attractive, is pursued as a source of basic subsistence and life-support. 'Art and Craft', 'Petty Trade' and 'Non-agricultural Labour' and pursued as alternatives to 'Service' and 'Cultivation', as next main source of support. 'Agricultural Labour' and 'Animal Husbandry' not only rank low from the point of view of their remunerativeness, as noted earlier, 'Cultivation' being essentially in the nature of subsistence farming do not and cannot afford scope for hiring agricultural labour on the farms.

In the Table 30 the source-wise distribution of annual household earnings for the Hill region are presented by size-class of landholdings. The perusal of the data presented in this table indicates that 'Cultivation' as a source of income grows in importance steadily in an ascending order as we move from the lowest size class of landholding of less than 0.25 acre to the highest one of 5.00 acres or more. The reverse is

Table 30

Source-wise Distribution of Annual Earnings by Size-Classes
of Landholdings for the Hill Region

(Earnings in Rs.)

Sources of income	SIZE CLASS OF LANDHOLDINGS							TOTAL
	0 to 0.25 acre	0.25 to 0.49 acre	0.50 to 0.99 acre	1.00 to 1.99 acres	2.00 to 3.99 acres	4.00 to 5.00 acres	5.00 acres & more	
Cultivation	21435 (6.29)	79222 (10.76)	108706 (14.31)	175144 (25.94)	126269 (36.71)	17850 (36.54)	68725 (39.14)	597351 (19.39)
Agricultural Labour	19470 (5.71)	54775 (7.44)	24390 (3.21)	21185 (3.14)	7650 (2.22)	-	4000 (2.28)	131470 (4.27)
Non-agricultural Labour	213565 (62.63)	295986 (40.20)	282010 (37.12)	279060 (41.33)	112240 (32.63)	3420 (7.00)	41160 (23.44)	1227441 (39.94)
Artisan	29200 (8.56)	9600 (1.30)	27500 (3.62)	24500 (3.63)	16600 (4.83)	18200 (37.26)	22000 (12.53)	147600 (4.79)
Petty trade	7800 (2.29)	41175 (5.59)	106445 (14.01)	43380 (6.42)	7000 (2.03)	-	4800 (2.73)	210600 (6.84)
Service	40950 (12.00)	195600 (26.56)	132100 (17.39)	58600 (8.68)	44500 (12.94)	8400 (17.20)	17200 (9.89)	497350 (16.14)
Pension	4800 (1.42)	41400 (5.62)	53200 (7.00)	56400 (8.35)	12600 (3.66)	-	7500 (4.27)	175900 (5.71)
Animal Husbandry	3755 (1.10)	18583 (2.53)	25345 (3.34)	16972 (2.51)	17125 (4.98)	980 (2.00)	10213 (5.81)	92973 (3.02)
Total	340975 (100.00)	736341 (100.00)	759696 (100.00)	675241 (100.00)	343984 (100.00)	48850 (100.00)	175598 (100.00)	3080685 (100.00)

Note : Figures within brackets are percentages to the total.

generally true for the 'Non-agricultural Labour'. 'Service' and 'Art and Craft' are important sources of income for the households in all size classes of landholdings. 'Agricultural Labour' has to be resorted to and depended upon by the households in a significant manner in the size classes of landholdings between '0.00 to 0.25' and '0.25 to 0.49' acre.

'Animal Husbandry' becomes of some significance as a source of income for the households having landholdings of half or more acres, particularly for those having landholding of '5.00 acres or more'.

The data relating to source-wise percentage distribution of annual household earnings of Hill region by castes is presented in Table 31. The data indicates that both the higher caste and intermediate caste households derive maximum proportion of their income from 'Non-agricultural Labour' which ranks first. Next in rank for both is 'Cultivation'. For the higher caste households 'Service' is the next highest, i.e., it holds third rank as a source of income, while for the intermediate caste people it ranks fourth, although at a far lower level; for the latter, the third rank as a source of income is held by the 'Art and Craft', which occupies the lowest rank for the higher caste households. 'Agricultural Labour' occupies the fifth rank for the intermediate castes and sixth for the higher castes. It is the other way round

Table 31

Source-wise Percentage Distribution of Annual Household Earnings by Castes for the Hill Region

Source of income	C A S T E S			Total
	Higher castes	Intermediate castes	Scheduled castes/tribes	
1. Cultivation	19.39 (2)	16.00 (2)	24.24 (3)	19.39 (2)
2. Agricultural labour	4.21 (6)	7.18 (5)	0.74 (7)	4.27 (7)
3. Non-agricultural labour	39.72 (1)	48.54 (1)	28.65 (2)	39.84 (1)
4. Art and Craft	1.47 (8)	8.91 (3)	35.33 (1)	4.79 (6)
5. Petty trade	7.46 (4)	2.46 (8)	6.25 (4)	6.84 (4)
6. Service	18.51 (3)	8.59 (4)	1.05 (6)	16.14 (3)
7. Pension	6.26 (5)	5.46 (6)	- (0)	5.71 (5)
8. Animal Husbandry	2.98 (7)	2.86 (7)	3.74 (5)	3.02 (8)
Total	100.00	100.00	100.00	100.00

Note: The figures within brackets indicate rank of the source of income.

in the case of 'Pension' as a source of income; it ranks fifth for the higher caste people, while it ranks sixth for the intermediate castes. 'Animal husbandry' holds seventh rank for both these groups, while 'Petty Trade' occupies fourth rank in the case of higher castes and lowest, i.e., the eighth rank in the case of intermediate castes. As regards the households belonging to Scheduled Castes/Tribes, it is the 'Art and Craft' which holds the first rank as a source of income for

them, and 'Non-agricultural Labour' ranks second. 'Cultivation' holds the third rank. 'Petty Trade' and 'Animal Husbandry' as sources of income rank fourth and fifth for them. 'Service' ranks sixth and it seems they are new entrants in this sector of employment and therefore there are no pensioners among them.

III

WAGES TREND AND AVERAGE WAGES

The trend in agricultural wages in Uttar Pradesh over a fairly long period has been studied and analysed by several scholars² alongside the trend in food and agricultural production under impact of changing agricultural technology and consequent changing demand for labour in agriculture. The data relating to rural consumer price index and agricultural wage indices at constant 1966-67 prices and with 1957-58 as base year is presented in Table 32. The data presented in the

-
1. Rohini Nayyar : 'Wages of Agricultural Labourers in Uttar Pradesh - A Note', Economic and Political Weekly, November 6, 1976, pp.1771-72; P.D. Shrimali: 'Agrarian Change, Agrarian Tensions, Peasant Movements and Organizations in Uttar Pradesh', 1981 (Mimeographed Report) and G.P. Mishra : 'Technological Change and Agricultural Wages in Uttar Pradesh' in R.T. Tewari and A. Joshi (ed.) : Development and Change in India, Ashish Publishing House, New Delhi, 1988, pp.291-319.

Table 32

Rural Consumer Price Index and Agricultural Wage
Indices in Uttar Pradesh

Year	Rural Consumer price index (at constant 1966-67 prices)	Index of Real Wage (at constant 1966- 67 prices Base 1957-58 = 100)
1957-58	42.8	100.00
1958-59	N.A.	N.A.
1959-60	45.5	92.63
1960-61	46.3	105.56
1961-62	46.7	90.00
1962-63	47.6	96.00
1963-64	55.3	84.00
1964-65	75.5	84.00
1965-66	77.9	96.00
1966-67	100.0	89.00
1967-68	109.5	97.86
1968-69	87.6	114.70
1969-70	95.2	115.09
1970-71	90.9	109.89
1971-72	N.A.	N.A.
1972-73	114.2	112.15
1973-74	148.9	103.46
1974-75	183.7	103.29
1975-76	144.8	120.83
1976-77	143.4	118.77
1977-78	168.7	102.55
1978-79	170.8	124.80
1979-80	193.8	113.15
1980-81	228.3	104.36
1981-82	234.1	104.15
1982-83	258.5	112.29
1983-84	305.4	106.02

Note: Computed from the data in Government of Uttar Pradesh, Directorate of Economics and Statistics, Quarterly Bulletin of Statistics and Government of Uttar Pradesh, State Planning Institute, Statistical Abstract, Uttar Pradesh Lucknow.

table indicates that the real agricultural wages declined or stagnated till 1967-68. They began to improve after that and with year-to-year fluctuation they were at their peak in the year 1978-79, when they showed about 25.00 per cent rise over the level in 1957-58. But, they again stagnated and declined thereafter, so that they were only marginally higher than 1957-58 by a mere six per cent, the index of real wage being 106.02 in 1983-84.

The study by Mishra (1988) shows that the real agricultural wages experience negligible growth in the hill region; and negative growth in Almora and insignificantly positive growth in Tehri Garhwal during 1966-67 to 1980-81.

The current rates of remuneration found to be prevalent in the Hill region, as deduced from the in-depth survey of the sample households for the Hill region are presented in Table 33. The data presented in the table indicate average daily remuneration worked out on the basis of the total earnings per worker by type of wage-work earned by a worker and the average number of days worked. It is about Rs.23.00 for the agricultural labourers, Rs.22.34 for the non-agricultural worker and Rs.26.60 for the artisan. These earnings spread over the year work out to an average of Rs.13.85 per day per worker in a year for agricultural labourer, Rs.13.95 for the

Table 33Average Daily Rates of Remuneration for Rural Labour
in the Hill Region

Category of rural labour	S E X		T O T A L	
	Male	Female	At current prices	At 1966-67 prices
1. Agricultural labour	26.29	19.35	22.99 (13.85)	6.29
2. Non-agricultural labour	22.34	14.55	22.34 (13.95)	6.11
3. Artisan	26.60	-	26.60 (18.38)	7.28

Note : Figures within brackets indicate average wage per worker per day in a year.

non-agricultural labourer and Rs.18.38 for the artisan. Deflating this amount of money wage by the index of rural consumer price index for 1988-89 at constant 1966-67 prices, the remuneration rate per worker per day works out to Rs.6.29 for the agricultural labour, Rs.6.11 for the non-agricultural labour and Rs.7.28 for the artisan. It needs, however, to be noted that the money wage-rate reported for agricultural labourer is actually inflated by the fact that it includes the charges for the plough and the bullocks, which the person hired for farm work has usually to carry on his own as per practice prevalent in the sample villages. It also needs to

be, incidentally, noted that the wages paid to female labour both in agricultural labour and non-agricultural jobs are lower than those paid to male labour, about 74.00 per cent of male labourer's remuneration for agricultural labour and 65.00 per cent of male labourer's remuneration for non-agricultural labour.

IV

PATTERN OF CONSUMPTION

The data relating to pattern of consumption by key selected items of consumption in value terms (rupees at current prices) is presented in Table 34. The data presented in the table indicates that average annual per capita consumption expenditure in value terms at current prices is Rs. 2169.75 in Almora district, Rs. 2044.40 in Tehri Garhwal district and Rs. 2101.77 in the Hill region. This works out to Rs. 180.81 per capita per month for Almora district, Rs. 170.37 per capita per month for Tehri Garhwal district and Rs. 175.15 per capita per month for the Hill region as a whole. The percentage distribution of the total per capita annual expenditure among major items of consumption indicates that about 20.00 per cent of the total expenditure is allocated to food-grains consumption, some 34.00 per cent goes to non-foodgrains, about

Table 34

Annual Per Capita Value of Consumption Expenditure
by Key Items of Consumption and its Percentage
Distribution

(Value in Rs. at current prices)

Items	Almora District		Tehri Garhwal District		Hill Region	
	Value	Percentage to total	Value	Percentage to total	Value	Percentage to total
Cereals	232.57	10.72	274.45	13.42	255.28	12.15
Pulses	142.56	6.57	176.83	8.65	161.14	7.67
Total Foodgrains	375.13	17.29	451.28	22.07	416.42	19.82
Non-foodgrains	643.19	29.64	769.68	37.65	711.78	33.87
Cloth	233.50	10.76	219.89	10.76	226.12	10.76
Education	57.35	2.64	41.95	2.06	49.00	2.33
Health	94.58	4.36	54.00	2.64	72.57	3.45
Drinks & Smoking	167.65	7.73	190.02	9.29	179.78	8.55
Lighting	55.26	2.55	51.87	2.54	53.42	2.54
Travelling	66.74	3.08	54.45	2.66	60.08	2.86
Social Functions	76.35	21.95	211.26	10.33	332.60	15.82

11.00 per cent is spent on cloth, social functions account for nearly 16.00 per cent, and drinks and smoking claims about 8.50 per cent. Only 2.33 per cent of the total expenditure goes to education and 3.45 per cent to health. Lighting and travelling get 2.54 and 2.86 per cent respectively. A close perusal of the data regarding Almora and Tehri Garhwal district indicates that with lower level of total expenditure, the percentage share of foodgrains and non-foodgrains is higher; cloth which is another essential claims nearly same share;

drinking and smoking claims also a higher share while social functions' share shows a drastic reduction to nearly half compared to one having higher level of total consumption expenditure. The share of all other items is lower than that of the one having higher total expenditure.

Table 35 depicts the average annual per capita consumption expenditure of persons engaged in different types of activities and its distribution on various items of consumption for each category. It is indicated that artisans, agricultural labourers, non-agricultural labourers and cultivators spend more on foodgrains and non-foodgrains compared to others and on cloth, the share of expenditure is nearly the same for all the categories, with the exception of those engaged in animal husbandry whose expenditure of foodgrains, non-foodgrains and cloth is the lowest both in absolute terms and relatively. But their expenditure on social functions, drinking and smoking, education and health is higher than those of others.

The data relating to average annual per capita consumption expenditure, both total and its item-wise distribution by castes for the Hill region is presented in Table 36. The data reveals for the intermediate castes, Rs. 2119.91 for the higher castes

Table 35

Annual Value of Per Capita Consumption Expenditure Item-wise
By Activity and its Percentage Distribution

(Value in Rs. at current prices)

Items	A C T I V I T Y					TOTAL	
	Cultiva- tion	Agricu- ltural labour	Non- agricu- ltural labour	Artisan	Petty Trade	Service Pension	Animal husban- dry
Cereals	241.53 (11.01)	319.07 (13.74)	242.00 (12.54)	1271.45 (42.69)	256.67 (12.28)	255.95 (11.55)	110.00 255.28 (5.82) (12.15)
Pulses	165.48 (7.54)	217.84 (9.38)	157.09 (8.14)	184.06 (6.18)	152.13 (7.28)	155.15 (7.00)	72.00 161.14 (3.81) (7.67)
Total Foodgrains	407.01 (18.56)	536.90 (23.12)	399.09 (20.68)	1455.51 (48.87)	408.80 (19.56)	411.10 (18.55)	182.00 416.42 (9.62) (19.82)
Non-Foodgrains	755.85 (34.46)	901.13 (38.81)	641.51 (33.25)	723.11 (24.28)	589.24 (28.18)	655.64 (29.58)	186.00 711.78 (9.83) (33.87)
Cloth	235.56 (10.74)	230.98 (9.95)	220.15 (11.41)	228.10 (7.66)	232.16 (11.10)	225.06 (10.15)	150.00 226.12 (7.93) (10.76)
Education	49.57 (2.26)	36.62 (1.58)	40.05 (2.11)	38.00 (1.28)	58.97 (2.82)	63.95 (2.89)	93.33 49.00 (4.41) (2.33)
Health	84.19 (3.84)	69.02 (2.97)	67.46 (3.50)	64.52 (2.17)	88.42 (4.23)	71.80 (3.24)	133.33 72.57 (7.05) (3.45)
Drinks & Smoking	182.65 (8.33)	236.15 (10.17)	169.46 (8.78)	197.87 (6.64)	159.98 (7.65)	173.66 (7.84)	200.00 179.78 (10.57) (8.55)
Lighting	58.07 (2.65)	68.03 (2.93)	53.71 (2.78)	57.17 (1.92)	46.11 (2.21)	48.55 (2.19)	40.00 53.42 (2.11) (2.54)
Travelling	72.70 (3.31)	57.95 (2.50)	54.76 (2.84)	66.61 (2.24)	68.32 (3.27)	60.77 (2.74)	83.33 60.08 (4.41) (2.86)
Social Function	347.67 (15.85)	185.33 (7.98)	282.56 (14.65)	147.62 (4.96)	438.66 (20.98)	505.75 (22.82)	833.33 332.60 (44.06) (15.82)
Total	2346.94 (100.00)	2448.62 (100.00)	2109.13 (100.00)	3164.49 (100.00)	2232.87 (100.00)	2384.70 (100.00)	2073.33 2101.77 (100.00) (100.00)

Table 36

Annual Per Capita Value of Consumption Expenditure by
Key Items of Consumption and Castes with Percentage
Distribution of Hill Region

(Value in Rs. at current prices)

Items	C A S T E S			Total
	Higher castes	Interme- diate castes	Scheduled Castes/ Tribes	
Cereals	252.92 (11.93)	286.45 (13.07)	223.40 (13.29)	255.28 (12.15)
Pulses	156.00 (7.35)	204.94 (9.35)	140.35 (8.35)	161.14 (7.67)
Total Foodgrains	408.92 (19.28)	491.39 (22.42)	363.75 (21.65)	416.42 (19.82)
Non-foodgrains	719.75 (33.95)	705.83 (32.20)	618.95 (36.83)	711.78 (33.87)
Cloth	226.55 (10.69)	242.66 (11.07)	187.08 (11.13)	226.12 (10.76)
Education	52.64 (2.48)	33.51 (1.53)	32.36 (1.93)	49.00 (2.33)
Health	69.23 (3.27)	102.61 (4.68)	55.94 (3.33)	72.57 (3.45)
Drinks and Smoking	179.30 (8.46)	196.55 (8.97)	152.29 (9.06)	179.78 (8.55)
Lighting	52.12 (2.46)	69.47 (3.17)	38.21 (2.27)	53.42 (2.54)
Travelling	59.93 (2.83)	71.05 (3.24)	39.86 (2.37)	60.08 (2.86)
Social Functions	351.47 (16.58)	279.16 (12.72)	192.12 (11.43)	332.60 (15.82)
Total	2119.91 (100.00)	2192.23 (100.00)	1680.56 (100.00)	2101.77 (100.00)

that the consumption level, both total, as well as, item-wise is low for those belonging to Scheduled Castes/Tribes; their total consumption expenditure is Rs.1680.56 compared to Rs.2192.23

and Rs.2101.77 for all households in the Hill region, taken together. It is also revealed that the intermediate caste people have higher level of consumption expenditure both item-wise and in total, except for the education and social functions. The higher caste people are at a lowest level of consumption expenditure compared to those of the intermediate castes except that on education and social functions, on which they spend more than the intermediate castes both in absolute terms and relatively.

Table 37 and 38 present data relating to average annual per capita foodgrains consumption in quantitative terms, i.e., in kilogrammes per capita per year, by activity and castes respectively. The data indicates that the total foodgrains consumption in the Hill region per person per year, on an average is 86.15 Kg. A perusal of the activity-wise consumption data, as presented in Table 37 indicates that the consumption of those engaged in agricultural labour ranks highest with 105.58 Kgs. per person per year. Next in order are artisans, pensioners, servicemen, non-agricultural labourers, petty traders and the cultivators. Those engaged in animal husbandry are at the lowest level with mere 44.00 Kg. per person per year.

Table 37Annual Per Capita Consumption of Foodgrains in
the Hill Region-Activity-wise

(Quantity in Kgs)				
FOODGRAIN CONSUMPTION				
Activity	Cereals	Pulses	Total food grains	Rank
Cultivation	68.70	15.22	83.92	(7)
Agricultural Labour	85.74	19.84	105.58	(1)
Non-agricultural "	69.94	14.24	84.18	(5)
Artisan	81.93	16.74	98.67	(2)
Petty Trade	70.33	13.79	84.12	(6)
Services	70.45	14.33	84.78	(4)
Pension	75.83	15.46	91.29	(3)
Animal Husbandry	38.00	6.00	44.00	(8)
Total	71.45	14.69	86.15	

Table 38 gives the foodgrain consumption data by castes for Almora district, Tehri Garhwal district and the Hill region taken as a whole. The consumption level is shown to be generally at a higher level in Tehri Garhwal district, compared to Almora district. As among the castes, the level of consumption is lowest for those belonging to the Scheduled Castes/Tribes in both districts, as well as, the Hill region as a whole. Those belonging to the intermediate castes have a higher level of consumption all along compared to those of the higher castes. For the Hill region as a whole, the average annual per capita foodgrains consumption is 85.34 Kgs. for the

Table 33

Per Capita Annual Consumption of Foodgrains by Castes

Castes	(Quantity in Kgs.)								
	ALMORA DISTRICT			TEHRI GARHWAL DISTRICT			HILL REGION		
	Cereals	Pulses	Total food-grains	Cereals	Pulses	Total food-grains	Cereals	Pulses food-grains	
Higher castes	60.93	11.63	72.56 (198.79)	78.00	16.02	94.02 (257.59)	71.10	14.24	85.34 (233.81)
Intermediate castes	74.79	18.37	93.16 (255.23)	100.26	21.63	121.89 (333.95)	77.05	18.66	95.71 (262.22)
Scheduled castes/tribes	61.40	9.28	70.68 (193.64)	65.85	14.86	80.72 (221.15)	64.80	13.55	78.35 (214.66)
Total	64.41	13.23	77.64 (212.71)	77.40	15.93	93.32 (255.67)	71.45	14.69	86.15 (236.03)

higher castes, 95.71 Kgs. for the intermediate castes and 78.35 Kgs. for the Scheduled Castes/Tribes. This works out to an average of 233.81 gms. per person per day for the higher castes, 262.22 gms per person per day for the intermediate castes, 214.66 gms. for the Scheduled Castes/Tribes and 236.03 gms., on an average for all people of the Hill region.

V

C O N C L U S I O N

The following main points may be drawn from the above discussion: Firstly, farming (i.e., agriculture) is the most important labour-absorbing (in terms of self-employment) activity but not so important from the point of view of income for the households for their dependence in the Hill region.

Secondly, agriculture is not significant for nor viable for the creation of wage employment in the region.

Thirdly, non-agricultural labour is the major source of income generation in the region. It also implies that non-agricultural activities are the major dependable source

of employment-cum-income generation in the region. The service sector is the third most dependable source of employment and income for the households there.

Fourthly, agricultural and non-agricultural wages are, more or less, uniform in the hill areas.

Fifthly, artisans do not produce (i.e., manufacture) but render their services on wage payment. Their daily wage rate is much higher than that of agricultural and non-agricultural labour.

Sixthly, the activity-wise or caste-wise pattern of consumption expenditure does not show any significant level of variation among households of different groups or categories. The pattern of consumption expenditure shows that at least 60 per cent of the household expenditure goes on for consumption of foodgrains, non-foodgrains and clothing. In the household consumer's budget, drinks and smoking take away varying from 7.00 to 10.00 per cent of the total expenditure. Education and health assume a quite small proportion of the consumer's budget in the region.

Finally, the per capita per day food consumption appears to fall much below the standard norm of 616 grams as prescribed for defining the poverty line for rural areas.

CHAPTER V

POVERTY AND DISABILITIES OF RURAL LABOUR HOUSEHOLDS

The purpose of this chapter is to discuss the extent of poverty among the sample households, and disabilities and handicaps from which they suffer in the Hill region. Discussion on the extent of poverty among them refers to identification of poor households and so to the problem of poverty measurement. The question of disabilities and handicaps that the households face in the hill areas is discussed on the basis of land and assets they possess, indebtedness they incur, types of property losses from which they suffer and the impact of anti-poverty programmes in the hill areas. All these actually reflect the types of disabilities and handicaps that the households or people face there. In some form or other, the discussion on them will also show the conditions in which they produce goods and earn incomes for their livelihood and subsistence in the Hill region.

I

EXTENT OF POVERTY

There are two major problems involved in defining the concept of poverty. The first relates to the problem of identifying the 'poor' and the second is the problem of

measurement. The RBI Report on All India Debt and Investment Survey (AIDIS) of 1971-72 gives the following description of the identity to the rural poor.¹

"The poor class of rural households includes cultivators who are only part-time farmers, as their land base is too small to make a living therefrom. They are mainly wage-earners as their source of income is from farm and non-farm employment. There is not much difference between a part-time cultivator and agricultural labourer, except that the former personally cultivates a piece of land. Similarly artisans or village craftsmen like weavers, blacksmiths, potters, carpenters, brick-layers, etc. producing some traditional foods for limited markets are also covered in this category. Some of their crafts are on the decline, while many other are afflicted by low productivity and poor income generating capacity. Thus many of them may also be supplementing their income from some kind of wage employment along with others in this case other non-cultivators forming

1. Quoted from Rao, V.G. and Mishra, G.P., 'Rural Poverty: Growth and Determinants' in Employment, Poverty and Public Policy, Monograph Series 9, Sardar Patel Institute of Economic and Social Research, Ahmedabad, 1981.

part of this group would cover unemployed persons, low village servants, people living on remittances from relatives, and wage earners depending on casual employment and some small local works".

Broadly speaking, poor peasants, tenants, landless labourers and other landless households are identified as the rural poor. The fact is that all these categories of rural households do exist in large numbers even today after the operation of planned development since 1951. But there arise some questions when such rural households are placed in the category of rural poor. Why and how are they called or identified as poor? Or what is the basis for identifying them poor? An answer to these questions needs some standard criteria to identify them as rural poor. A simple answer to these questions may be that the rural households like poor peasants, tenants, landless labour, craftsmen etc. do not possess the required output (or income) generating sources or means (such as land and assets) nor have opportunities to earn income for sustaining their livelihood and subsistence.

But the asset and landholding criteria of poverty measurement may not give some precise idea about the extent to which a household is able to meet the basic living requirements, such as food and clothing. Most of the studies

on poverty (such as those by Ojha,² Dandekar-Rath,³ Minhas,⁴ Bardhan⁵ and Ahluwalia⁶) have used the norm of a minimum per capita monthly consumption expenditure which is also shown to be equivalent to some calories intake needed for the subsistence of a person and life in rural areas. The use of this consumption expenditure or income norm of poverty is also supposed to cut across the people of different groups.

The extent of poverty prevailing among the sample households in the Hill region is, thus, measured on the basis of two criteria: (a) per capita monthly consumption expenditure, and (b) minimum annual income required per household. The first criterion is taken from the Sixth Five Year Plan which adopted the physical survival definition of the poverty line. According to this, a minimum of 2400 calories per person per day is the minimum for rural areas and 2100 calories per person per day is the minimum for urban areas. This calories intake is converted to monthly per capita expenditure figure. At 1979-80 prices, this

2. Ojha, P.D., 'A Configuration of Indian Poverty, Inequality and Levels of Living', RBI Bulletin, January 1970.
3. Dandekar, V.M. and Rath, N., 'Poverty in India', School of Political Economy, 1971.
4. Minhas, B.S., 'Rural Poverty, Land Distribution and Development strategy : Facts & Policies', Indian Economic Review, 1970.
5. Bardhan, P.K., 'On the Minimum Level of Living and the Rural Poor', Indian Economic Review, 1970; 'The Green Revolution and Agricultural Labourers', EPW Special Number, 1970; and 'The Green Revolution and Agricultural Labourers : A Correction', EPW, November 14, 1970.
6. Ahluwalia, M., 'Rural Poverty and Agricultural Performance in India', Journal of Development Studies, 1977.

worked out to Rs.76 for rural areas and Rs.88 for urban areas. The amount of Rs.76 is made equal to Rs.140.30 at 1988-89 prices with 1970-71 prices on the basis of Rural Consumer Price Index for the Hill region in U.P. rural areas. In other words, the per capita monthly expenditure of Rs.140.30 is taken for defining the poverty line for measuring the extent of poverty among the sample households in the Hill region. The annual income per household or family is adopted from the Department of Rural Development, Government of India which classified families below the poverty line in four broad categories which are as follows⁷:

Category	Amount of family income range (in Rs.)
(a) Destitute	Less than 2265
(b) Very-very poor	2266 - 3500
(c) Very poor	3501 - 5000
(d) Poor	5001 - 6400

These four income categories were adopted for the purpose of alleviating rural poverty through the implementation of anti-poverty programmes in rural areas. All these income ranges indicate that a family or household having annual income upto Rs.2265 is destitute; with an annual income in

7. Please see Ghosh, D.N., 'Financial Bodies Must be Sound', The Economic Times, June 26, 1986.

between Rs.2266 and Rs.3500 is very-very poor; with an annual income ranging from Rs.3501 to Rs.5000 is very poor; and with an annual income more than Rs.5000 but less than Rs.6400 is poor. These four groups of rural poor were identified for launching direct attack on rural poverty through the implementation of anti-poverty programmes under the IRDP Scheme of the Government. At 1988-89 rural Consumer Price Index with 1970-71 prices, those four income ranges were standardised as follows:

- (a) Rs.0 - 3012;
- (b) Rs.3013 - 4655;
- (c) Rs.4656 - 6650; and
- (d) Rs.6651 - 8513

These income-range groups are used for identifying for destitute, very-very poor, very poor and poor households respectively.

Let us take the first criterion, i.e., monthly per capita expenditure of Rs.140, to measure the extent of poverty among the sample households. Table 39 shows that 49 per cent of the households are below the poverty line in the Hill region; while 64 per cent of the total households in Almora district and 33 per cent of the total households in Tehri Garhwal district fall below the poverty line. The same table also indicates that the proportion of the sample households below the poverty line

Table 39
Incidence of Poverty

Village/District	Percentage of households below poverty line (i.e. Rs. 140 per capita monthly expenditure)
1. Deoli	60.00
2. Malgaon	70.00
3. Falseema	65.00
(a) Almora	64.00
4. Arakota	42.00
5. Bada Sweeta	45.00
6. Manjud	32.00
(b) Tehri Garhwal	33.00
(c) Hill Region	49.00

belonging to all the villages of Almora district is quite high, ranging from 60.00 per cent in Deoli to 70.00 per cent in Malgaon. But in all the villages of Tehri Garhwal, the proportion of their respective total households below the poverty line is much lower than what is found in all the villages of Almora district.

The extent of poverty among the sample households based on four income groups which identify four categories

of the poor is presented in Table 40. In this table, four more income groups are also presented on the basis of the field data. This table shows that about 43.00 per cent of the total households in the Hill region are poor; of which the destitute, very-very poor, very poor and poor households constitute about 2.67 per cent, 5.67 per cent, 15.33 per cent and 19.00 per cent of the total households respectively. The rest (i.e., 57.33 per cent) of the households are above the poverty line. In Almora district, the destitute, very-very poor, very poor and poor households respectively constitute 3.33 per cent, 6.00 per cent, 23.33 per cent and 24.67 per cent of the total number of households. In this way, in all 57.33 per cent of the total households in Almora are poor. The rest of the households are thus above the poverty line. About 28.00 per cent of the total households in Tehri Garhwal are poor, inclusive of all the categories of poor households. In this district, destitute, very-very poor, very poor and poor households constitute 2.00 per cent, 5.38 per cent, 7.33 per cent, and 13.33 per cent of the total households respectively.

The village-wise extent of poverty within Almora and Tehri Garhwal district, as presented in Table 41 and 42, shows that the incidence of poverty is much higher among the

Table 40
Extent of Poverty and Pattern of Income Distribution

Income group (in Rs.)	ALMORA		TEHRI GARHWAL		HILL REGION	
	Percentage of households	Income per household (Rs.)	Percentage of households	Income per household (Rs.)	Percentage of households	Income per household (Rs.)
Less than 3012	3.33	1525.00	2.00	2448.00	2.67	1363.75
3013 - 4655	6.00	4115.33	5.33	4013.75	5.67	4067.53
4656 - 6650	23.33	5530.31	7.33	5613.64	15.33	5550.24
6651 - 8512	24.67	7480.49	13.33	7506.30	19.00	7489.54
8513 - 10000	12.00	9229.28	16.67	9066.60	14.33	9134.70
10001 - 15000	14.67	11869.45	39.33	12089.61	27.00	12029.81
15000 - 20000	8.67	16362.46	14.00	17218.24	11.33	16891.03
20000 & above	7.33	27669.09	2.00	22850.00	4.67	26636.43
ALL	100.00	9728.86	100.00	10809.04	100.00	10268.95

Table 41

Extent of Poverty and Pattern of Income Distribution in Almora's Villages

Income group (in Rs.)	DEOLI		MALGAON		FALSEMA	
	Percentage of households	Income per household (Rs.)	Percentage of households	Income per household (Rs.)	Percentage of households	Income per household (Rs.)
Less than 3012	0.00	0.00	0.00	0.00	0.10	1525.00
3,013 - 4,655	8.00	4,115.75	6.00	4,231.67	4.00	3,940.00
4,656 - 6,655	20.00	5,531.70	30.00	5,665.27	20.00	5,326.50
6,656 - 8,512	20.00	7,497.80	28.00	7,505.14	26.00	7,440.68
8,513 - 10,000	20.00	9,150.00	6.00	9,225.33	10.00	9,390.20
10,001 - 15,000	18.00	11,597.56	18.00	11,480.56	8.00	13,356.25
15,001 - 20,000	4.00	16,786.50	8.00	16,782.50	14.00	16,001.29
20,000 & above	10.00	30,670.00	4.00	26,025.00	8.00	24,740.00
All	100.00	10,591.18	100.00	9,058.54	100.00	9,536.86

Table 42

Extent of Poverty and Pattern of Income Distribution
in Tehri Garhwal's Villages

Income Groups (in Rs.)	Arakota			Bada Sweeta			Manjud		
	Percentage of households	Income per household (Rs.)	Percentage of households	Percentage of households	Income per household (Rs.)	Percentage of households	Percentage of households	Income per household (Rs.)	Percentage of households
Less than 3012	0.00	0.00	2.00	2.00	2,950.00	4.00	4.00	2,167.50	
3,013 - 4,655	8.00	3,938.75	8.00	8.00	4,088.75	0.00	0.00	0.00	
4,656 - 6,650	12.00	5,494.17	6.00	6.00	5,571.67	4.00	4.00	6,035.00	
6,651 - 8,512	12.00	7,375.00	14.00	14.00	7,240.71	14.00	14.00	7,334.43	
8,513 - 10,000	14.00	9,037.86	28.00	28.00	9,022.57	8.00	8.00	9,271.00	
10,001 - 15,000	32.00	11,882.00	30.00	30.00	12,476.80	56.00	56.00	12,000.82	
15,001 - 20,000	18.00	17,752.33	10.00	10.00	16,439.00	14.00	14.00	17,088.14	
20,000 & above	4.00	21,700.00	2.00	2.00	25,150.00	0.00	0.00	0.00	
All	100.00	10,990.36	100.00	100.00	10,150.36	100.00	100.00	11,286.00	

households in all the villages of Almora district than that prevailing among the households in all the villages of Tehri Garhwal.

All these tables show not only the extent of poverty but also the pattern of income distribution among the households of different income groups at the village level, district level and region level. The per household income figures indicate a wide range of income inequality among the households of different income groups. Such a range of income inequality, in fact, corresponds to the income classificatory structure of the households in the villages or in the districts or in the Hill region as a whole. The incomes of the first three categories of the poor per household do not appear to be enough to sustain the lives of family members; if the per capita monthly consumption expenditure of Rs.140 is taken into consideration. This also seems to be true even in the case of poor households falling within the income range of Rs.6651 to Rs.8512; as the income per household is Rs.7489 in the Hill region, Rs.7506 in Tehri Garhwal and Rs.7480 in Almora. The income per household, even in case of the fourth category of poor does not seem to be enough for sustaining the level of subsistence in all the

Table 43

Extent of Poverty and Pattern of Income Distribution

Per Capita Income in Different Income Groups (in Rs.)									
Village/ District	Less than 3012	3013- 4655	4656- 6650	6651- 8512	8513- 10000	10001- 15000	15001- 20000	20000 +	All
1. Deoli	0.00	1266.38	1063.79	1414.68	1386.36	1932.93	3052.09	3407.78	1801.22
2. Malgaon	0.00	746.76	1249.69	1332.53	1537.56	1812.72	2314.83	4003.85	1629.23
3. Falseema	847.22	606.15	1401.71	1825.06	2134.06	2963.06	2300.00	4948.00	2238.70
4. Almora Distt.	847.22	861.35	1225.07	1520.76	1567.24	2024.25	2658.90	3902.05	1859.02
5. Bada Sweeta	491.67	743.41	879.74	1299.62	1329.64	1641.68	2651.45	3592.86	1524.08
6. Manjud	722.50	0.00	862.14	1126.35	1278.76	1705.70	1785.33	0.00	1558.90
7. Arakota	0.00	1312.92	1831.39	1701.92	1757.36	2501.47	2904.93	3616.67	2338.37
8. Tehri Garhwal Distt.	607.08	944.41	1210.78	1316.89	1416.66	1843.12	2363.29	3607.89	1743.39
9. Hill Region	710.00	898.03	1221.58	1442.24	1476.66	1888.40	2464.79	3844.43	1796.32

villages of the Hill region; if the per capita monthly consumption expenditure of Rs.140 is taken into account.

The figures presented in Table 43 indicate that not only all the four categories of rural poor; i.e., destitute, very-very poor, very poor and poor, have low per capita annual income but also the households of some other higher income groups as Table 43 indicates. In other words, the rural labour households in most of the income groups indicate that the per capita income is not much higher than the per capita annual expenditure of Rs.1680 (Rs.140 x 12) in the Hill region.

II

DISABILITIES OF THE RURAL LABOUR HOUSEHOLDS

The foregoing discussion on the extent of poverty among the sample households shows that a sizeable number (or proportion) of the households is below the poverty line. This implies that the poverty among them consists in their incapacities to lead a minimally acceptable life in the hill areas.

The hill areas are high energy areas of fragile ecosystem. Here each valley and each spur have their own distinctive physical and socio-cultural attributes. A delicate ecological balance, isolated location, difficult terrain

and scattered rural settlements and population are some of the basic ubiquitous characteristics of the Hill region that make human lives difficult and hinder the process of development there. In other words, the geo-physical conditions of the region create a number of natural hazards and constraints on the socio-economic development of its countrysides and rural people, that too, in the absence of appropriate technological development and socio-economic facilities in the region. All such conditions have infallible bearing on all socio-economic activities in which the people are engaged, and on the problems that they face in leading their lives.

Agricultural Situation

Farming is an important activity for the people in the Hill region. Given the geo-physical conditions and natural hazards there, the holding size and a quite limited supply of land for cultivation, lack of irrigational facilities, nature-constrained water management, nature-bound crop culture and low yield potential constitute the first type of disabilities for the rural labour households in the hill villages of the region. Table 44 shows that most of the households own and cultivate tiny, marginal and small land holdings. Rain-fed and nature-bound irrigation is the only

Table 44

Extent of Irrigation and Cropping Pattern

Holding size group (in acres)	Percent- tage of total area irrigated	Percentage of Total Area Under				Total
		Wheat	Rice	Other food crops	Non-food crops	
<u>ALMORA DISTRICT</u>						
Less than 0.25	12.00	32.89	19.21	36.44	11.54	100.00
0.25 - 0.49	22.83	39.75	28.08	23.41	9.76	100.00
0.50 - 0.99	17.13	43.36	36.12	12.58	7.95	100.00
1.00 - 1.99	14.76	42.70	29.73	17.88	9.69	100.00
2.00 - 3.99	26.63	38.70	29.75	11.80	19.75	100.00
4.00 - 4.99	16.10	35.83	33.33	17.50	13.33	100.00
4.00 & above	-	-	-	-	-	-
All	18.82	40.48	29.96	18.83	10.73	100.00
<u>TEHRI GARHWAL</u>						
Less than 0.25	4.40	48.61	26.39	18.06	6.94	100.00
0.25 - 0.49	13.58	36.80	33.77	17.60	11.83	100.00
0.50 - 0.99	15.50	39.94	32.31	20.32	7.43	100.00
1.00 - 1.99	12.53	30.27	33.63	15.06	13.05	100.00
2.00 - 3.99	28.75	36.25	24.35	16.66	22.74	100.00
4.00 - 4.99	18.02	33.25	28.35	17.13	21.26	100.00
5.00 & above	16.00	35.35	26.96	28.62	9.07	100.00
All	18.17	36.73	28.87	20.79	13.64	100.00
<u>HILL REGION</u>						
Less than 0.25	11.43	33.70	19.61	35.41	11.28	100.00
0.25 - 0.49	19.93	38.83	29.84	21.61	9.71	100.00
0.50 - 0.99	16.13	41.47	34.01	16.86	7.66	100.00
1.00 - 1.99	13.24	29.88	32.21	16.08	11.83	100.00
2.00 - 3.99	28.35	36.77	25.50	15.63	22.10	100.00
4.00 - 4.99	17.38	33.93	29.66	17.23	19.19	100.00
5.00 & above	16.01	35.35	26.96	28.62	9.07	100.00
All	18.35	37.90	29.21	20.18	12.71	100.00

source of water for irrigating land for cultivation; that too is not reported to be significant in the villages. Some 18.35 per cent of the total area is irrigated in the Hill region. The extent of irrigation does not vary much from one district to another; as it is 13.17 per cent in Tehri Garhwal and 18.82 per cent in Almora. The holding-wise extent of irrigation shows that the extent of irrigation belonging to the holding size of upto 4 acres is highest, indicating 28.35 per cent in Hill region, 28.75 per cent in Tehri Garhwal and 26.39 per cent in Almora. This is also true in respect of all the villages belonging to these two districts.

The holding-wise extent of irrigation is not significantly different from one district to another. The inter-holding extent of irrigation across the villages does not vary much in the districts. However, such comparison is not so meaningful, as the nature of irrigation and its sources are concerned. Crop culture is nature-bound in the sense of the physical characteristics of land available for crop cultivation and the rain-fed nature and traditional method of irrigation. Rice and wheat are the principal crops in the region which are cultivated in about 67 per cent of the cropped area there. Some inferior crops like Ragi are also cultivated in about 20.18 per cent of the total cropped area

in this region. In all, 87.27 per cent of the total cropped area is covered under the cultivation of principal and other crops. In the districts of Almora and Tehri Garhwal, these principal crops and inferior crops are cultivated in 89.27 per cent and 86.40 per cent of their respective total cropped area. The rest of the cropped area is allocated for the cultivation on non-foodgrain crops like vegetables and local fruits. Such cropping pattern is more or less the same at the inter-holding size-level in the districts and the region, except in case of the households with holding size-groups of 2.00 to 3.99 acres and 4.00 to 4.99 acres of land; as Table 44 indicates.

It is interesting to note from Table 45 that yields of all crops per acre are quite low but the intensity of cropping is not low; if it is compared with the intensity of cropping in the State and in its most agriculturally developed region, i.e., Western U.P. The average yield of rice is 4.56 quintals and that of wheat is also 4.76 quintals in the Hill region. The average yield of other food crops is as low as 1.48 quintal in the Hill region. Similar is the case with respect to non-food crops. However, the average yield of these crops, amounting to 3.29 quintals per acre, is higher than that of the other food crops. The yield situation of the food crops

Table 45

Intensity of Per Acre Cropping and Yield

Holding size groups (in acres)	Intensity of cropping	Yield per acre (in quintals)				
		Wheat	Rice	Other food crops	Non-food crops	All crops
ALMORA DISTRICT						
Less than 0.25	220.55	7.61	8.58	3.31	3.12	5.71
0.25 - 0.49	193.18	5.65	6.98	2.88	2.63	5.11
0.50 - 0.99	163.28	6.10	5.38	3.90	2.25	5.26
1.00 - 1.99	154.53	4.99	4.62	1.06	5.66	4.24
2.00 - 3.99	148.80	4.19	3.92	1.75	1.97	3.38
4.00 - 4.99	146.34	4.11	3.77	2.47	2.50	3.50
5.00 & above	-	-	-	-	-	-
All	167.92	5.44	5.46	2.50	3.19	4.65
TEHRI GARHWAL DISTRICT						
Less than 0.25	160.00	4.20	4.15	3.84	2.40	4.00
0.25 - 0.49	189.97	4.11	3.88	1.43	1.90	3.30
0.50 - 0.99	127.92	5.14	5.55	1.39	2.03	4.28
1.00 - 1.99	125.78	5.80	5.34	1.42	3.87	4.73
2.00 - 3.99	128.82	5.20	4.13	1.12	4.78	4.17
4.00 - 4.99	209.01	1.95	2.25	0.89	1.95	1.85
5.00 & above	143.11	2.98	2.89	0.79	1.44	2.19
All	137.59	4.11	4.13	1.06	3.32	3.49
HILL REGION						
Less than 0.25	215.97	7.33	8.25	3.32	3.09	5.61
0.25 - 0.49	192.18	5.20	5.89	2.51	2.35	4.55
0.50 - 0.99	141.62	5.59	5.47	2.23	2.13	4.72
1.00 - 1.99	134.92	5.48	5.10	1.28	4.40	4.55
2.00 - 3.99	132.68	4.98	4.08	1.22	4.25	4.00
4.00 - 4.99	187.95	2.55	2.69	1.31	2.05	2.28
5.00 & above	143.11	2.98	2.89	0.80	1.44	2.19
All	145.80	4.76	4.56	1.48	3.29	3.85

and non-food crops does not present any significant yield differences in the two districts of the region, except in case of average yield for wheat and rice in Almora which is about 5.5 quintals per acre. The inter-holding level of average yield, by and large, shows an inverse relationship between holding yield and size.

The average crop yields are quite low despite high cropping intensity. The intensity is high because the households have to cultivate more than one crop in order to extract produce from limited land and its limited yield potential in given natural conditions. The fact is that the land is not fertile nor modern inputs and practices can be comfortably put into operation because of the geo-physical conditions of the region.

Asset Holding and Distribution

The ability of the rural labour households in improving their socio-economic conditions also lies in the types of assets they hold. The pattern of distribution of assets possessed by them, as presented in Table 46, shows that land and house (inclusive of covered area) constitute 90.31 per cent of the total assets owned by all the households in the Hill region. The households belonging to Almora and Tehri

Garhwal districts own about 88 per cent and 91.14 per cent of the total value of assets respectively. The holding-wise distribution of assets also shows that the households of all categories have land and house, constituting a major part of their respective total assets in both districts taken separately or taken together in the region. The households with the holding size of upto 0.5 acre and 5.00 acres and above possess livestock constituting of 12.36 per cent and 15.34 per cent of their respective total assets in the Hill region. This is also true in respect of the households with 5 acres and above holding size in Tehri Garhwal but not in rest of the households in the category of upto 0.5 acre and 0.5 to 0.99 acre of holding size in the district, although the households in these categories possess the highest percentage (i.e. a little more than 5 per cent) of livestock in their respective total assets, at the inter-holding level. The households belonging to the first two categories in Almora district possess livestock 14.28 per cent and 10.46 per cent of their respective total assets in the district. All these households own livestock for the purpose of hiring out bullock with labour for wages and selling milk for incomes. They do just to supplement something for subsistence living. The households do not own modern agricultural machinery and implements and the value of agricultural machinery and implements constitute a quite

insignificant portion in the total value of their assets. In fact, the distribution pattern of assets - whether it is observed at the inter-holding level or across the village or districts, shows that except land, the households do not own productive assets significantly in the region. Lack of productive assets owned by them is one of the disabilities that the rural labour households face in the hill areas. Even the proportion of household assets meant for their domestic use is quite insignificant in the hill areas.

The value of assets per household, as presented in Table 47, shows a positive relationship between the assets and the holding size. The value of assets per household, thus, increases with an increase in the holding size. Moreover, it is significantly high for all categories of households in the villages, districts and in the region. It is so because the value of land is quite high. It is quite high because not because of its yield potential but that of the land being scarce and the main source of human existence and subsistence, otherwise the value of productive assets per household required for productivity generation is low in the hill areas.

Nature and Types of Indebtedness

The nature and types of indebtedness have important

Table 47
Total Value of Assets Per Household (in Rs.) : Holding-wise in Hill region

Holding size group (in acres)		ASSETS PER HOUSEHOLD				Total
		Land	House	Livestock	Agricultural imple-ments	Household assets
HILL REGION						
Less than 0.25		13163	11699	3705	303	1104
0.25 - 0.49		27757	16676	4169	320	1157
0.50 - 0.99		48020	29112	3867	352	2745
1.00 - 1.99		76389	29350	4462	321	3936
2.00 - 3.99		141814	50189	4692	389	4947
4.00 - 5.00		165233	34667	4330	316	4498
& above		215000	50000	49200	365	6010
All		61458	26394	6247	343	2831
GARHWAL						
Less than 0.25		34166	53066	5200	363	1345
0.25 - 0.49		41156	25217	3689	450	1383
0.50 - 0.99		57835	32690	4654	383	2918
1.00 - 1.99		83302	37137	4269	331	4375
2.00 - 3.99		144260	56200	4687	414	4850
4.00 - 5.00		180000	43000	5100	325	5560
& above		215000	50000	49200	565	6010
All		91655	38584	8575	399	3689
ALMORA						
Less than 0.25		11587	8596	3593	299	1086
0.25 - 0.49		22253	13195	4366	267	1656
0.50 - 0.99		32751	23546	2641	303	2474
1.00 - 1.99		62233	13404	4857	301	3037
2.00 - 3.99		130560	22540	4720	268	5397
4.00 - 5.00		135700	18000	2790	300	2375
& above		-	-	-	-	-
All		31262	14205	3919	287	1974
						51647

bearing on the socio-economic conditions of the rural labour households. They also determine the ability to improve their conditions. Table 48 shows that 24 per cent of the total

Table 48

Distribution of Indebted Households, Agency-wise
Distribution of Loans and Interest Rate Structure

Description	Almora	Tehri Garhwal	Hill Region
1. Percentage of total households indebted	26.67	21.33	24.00
2. Loans per household (in Rs.)	4438	5847	5064
3. Percentage distribution of indebted households according to purposes for which loans taken:			
(a) Social Function	37.50	34.37	36.11
(b) Productive purpose	42.50	53.13	43.25
(c) House construction	20.00	12.50	20.64
4. Percentage distribution of indebted households sourcewise loan taken:			
(a) Friends and Relatives	9.63	5.07	7.29
(b) Money-lenders	37.86	23.67	30.58
(c) Banks	52.51	71.26	62.13
5. Percentage of indebted households yet to repay loans	55.00	46.87	51.38
6. Agency-wise interest rate (in % per year)*			
(a) Friends and Relatives	10-36	38-40	10-36
(b) Money-lenders	26-36	37-47	32-41
(c) Banks	17.20-17.60	13-17.67	14.50-17.67

*Based on household-wise information, and so an average of the lowest and highest figures quoted by the respondents is presented here.

households are indebted to different agencies in the Hill region. About 27 per cent and 21.33 per cent of the total households belonging to Almora and Tehri Garhwal districts respectively are indebted in the Hill areas. The amount of loans per indebted household is Rs.5064 in the Hill region, Rs.5847 in Tehri Garhwal and Rs.4438 in Almora.

The purpose-wise distribution of loans indicates that the indebted households have taken 56.75 per cent of their total loans for house construction and social functions in the Hill region. The district-wise break-up shows that the loans for these two purposes constitute about 47 per cent and 58 per cent of the total loans in Tehri Garhwal and Almora districts respectively. In other words, the amounts of loans taken by the indebted households for productive purposes constitute 43.25 per cent of the total loans in Hill region, 53.13 per cent of the total loans in Tehri Garhwal and 42.50 per cent of the total loans in Almora.

To whom the households are indebted and on what terms is another dimension of rural indebtedness that deserves attention. Table 48 indicates that the households have taken loans from three major sources : (a) friends and relatives, (b) money-lenders and (c) banking institutions. About 38 per cent of the total households are indebted to friends-cum-relatives and money-lenders in the Hill region. The house-

holds that have taken from the money-lenders alone, constitute about 31 per cent of the total indebted households. Some 62 per cent of the indebted households have got loans from the banking institutions. About 24 per cent of the total households in Tehri Garhwal are indebted to the money-lenders and about 38 per cent of the total households in Almora have taken loans from the money-lenders. In Tehri Garhwal and Almora districts, 5.07 per cent and 7.67 per cent of their respective total indebted households have taken loans from the friends-cum-relatives. In this way, 71.26 per cent of the indebted households in Tehri Garhwal and 52.51 per cent of the indebted households in Almora have taken loans from the banks. It is noteworthy here that not less than one-third of the total indebted households belonging to these two districts taken separately or together still take loans from the friends-cum-relatives and money-lenders. About 47 per cent of the total indebted households in Tehri Garhwal, 55 per cent of the total households in Almora and 51.38 per cent of the households in the Hill region have yet to repay the loans taken from different sources of financial institutions.

The interest rates charges by different agencies are not found to be uniform from one household to another within a given village of the district and so from one district to

another in the region. It is found that the rate of interest charges by the money-lenders, on an average, varies from 32 per cent to 41 per cent in the Hill region, from 37 per cent to 47 per cent in Tehri Garhwal district and from 26 per cent to 36 per cent in Almora district. Similarly, the rate of interest charged by the friends-cum-relatives varies from 10 per cent to 33 per cent in the Hill region, from 36 per cent to 40 per cent in Tehri Garhwal district, and from 10 per cent to 36 per cent in Almora district. Surprisingly, a lot of variation is also reported in the rate of interest charged by the banks from the households, as Table 48 indicates. In fact, such variation is partly due to variation in the nature and types of loans advanced to the households by the banks and partly due to the commissions taken by the agents while taking loans from the banks. What all this indicates is that different rates of interest charged by different financial institutions from the indebted households are exploitative in character and present a specific kind of money-cum-credit market in the hill areas. This market is dominated by interest-bearing capital that thrives on the appropriation of surplus produce or unpaid labour there.

Access to Drinking Water Facilities

Drinking water is one of the basic needs for the people in the hill areas. The geo-physical conditions with undulating

character of land topography come on the way of the people to dig well or to sink tubewell or reservoir for managing the supply of water for domestic consumption there, despite the availability of natural sources of water in abundance.

Therefore, insufficient supply of water for domestic consumption makes the lives of the hill people difficult. Moreover, it is very difficult and costly for them to manage the sources of water for domestic consumption there. Table 49 shows that the river or stream and Shrota are the major sources of water for domestic consumption. Tap water is also available in some of the villages in the Hill region. But it is not so as found in the plains. Tap water is that source of water which is supplied from the Shrota through pipe or from the stream water through pipe or the water stored from the natural source of water which is taken to a house with the help of energised pump through pipe.

Table 49 indicates that about 85 per cent of the total households in Almora district, about 56 per cent of the total households in Tehri Garhwal and about 72 per cent of the total households belonging to both districts taken together get drinking water from the river and Shrota in the Hill areas. Only 13.34 per cent of the total households in Almora district get tap water. But in Tehri Garhwal, 43.34 per cent of the

Table 49

Distribution of Households with Sources of Drinking Water and Electrified Households in Villages and Districts of Hill Region

Villages	Number of electrified	Households with sources of Drinking Water			Households away from sources of Drinking water (in Km.)					Households with insufficient water
		River	Shrota	Tap	Less than 0.5	Less than 1.5	Less than 2.5	Less than 5	More than 5	
Deoli	-	4 (8.00)	46 (92.00)	-	23 (46.00)	-	13 (26.00)	7 (14.00)	7 (14.00)	45 (90.00)
Falseema	13 (26.00)	-	30 (60.00)	20 (40.00)	7 (14.00)	9 (18.00)	6 (12.00)	28 (56.00)	-	22 (44.00)
Malgaon	34 (68.00)	10 (20.00)	40 (80.00)	-	3 (6.00)	34 (68.00)	13 (26.00)	-	-	28 (56.00)
Almora district	47 (31.33)	14 (9.33)	116 (77.33)	20 (13.34)	33 (22.00)	43 (28.67)	32 (21.33)	35 (23.33)	7 (4.67)	95 (63.33)
Arakota	18 (36.00)	-	28 (56.00)	22 (44.00)	22 (44.00)	12 (24.00)	6 (12.00)	8 (16.00)	2 (4.00)	10 (20.00)
Manjud	11 (22.00)	-	25 (50.00)	25 (50.00)	25 (50.00)	15 (30.00)	8 (16.00)	2 (4.00)	-	5 (10.00)
Bada Sweeta	42 (84.00)	11 (22.00)	21 (42.00)	18 (36.00)	1 (2.00)	24 (48.00)	23 (46.00)	2 (4.00)	-	4 (8.00)
Tehri Garhwal District.	71 (47.33)	11 (7.33)	74 (49.33)	65 (43.34)	48 (32.00)	51 (34.00)	37 (24.67)	12 (8.00)	2 (1.33)	19 (12.67)
Hill Region	118 (39.33)	25 (8.33)	190 (63.33)	85 (28.34)	81 (27.00)	94 (31.33)	69 (23.00)	47 (15.67)	9 (3.06)	114 (38.00)

total households manage to get tap water. The source-wise distribution of households in different villages shows that the river and Shrota are the main sources of drinking water in the villages of Almora district. However, the situation is different in the villages belonging to Tehri Garhwal. Not less than 36 per cent of the households belonging to the villages in Tehri Garhwal are reported to get tap water.

Another difficulty that the households face there, is in regard to fetching water from the source which is situated at some distance from the village. The same table shows that most of the households in the villages fetch water from their respective sources of water which are more than half Km. away from there. In many cases, they have to travel more than 2-5 Kms. in the hill areas. Covering of some distance to fetch drinking water is not the only problem but also the problem of carrying water by the family members through undulating and rugged hills in the region. Hence the accessibility of the people to water for domestic consumption is one of the most significant disabilities of the households in the hill areas.

The proportion of the households reporting insufficient water for domestic consumption is found to be more in Almora district than in Tehri Garhwal. The same table shows that

63.33 per cent of the total households belonging to all villages in Almora district have reported to be in insufficient drinking water; while it is only about 13 per cent in Tehri Garhwal. In the Hill region, 38 per cent of the total households have reported to have insufficient drinking water.

In this way, dependence of the households on the natural sources of drinking water along with its insufficient supply, the location of these sources of water away from the rural settlements and fetching water from distant places do not present only the physical hardships that the households face in managing water for domestic consumption but also the problem of availability of water from the point of view of its purity and sanitation.

Property Losses

The rural settlements reside in such natural conditions which make them difficult to overcome built-in geo-physical difficulties and problems. As a result, they have to frequently suffer from property losses. Table 50 shows that 36 per cent of the total households in both districts taken together have reported to have been suffered from different types of property losses. About 39 per cent of the total households in

Table 50

Distribution of Households by Property losses of Different Types in Villages and Districts of Hill Region during last ten years

Village	HOUSEHOLDS REPORTING				VALUE OF PROPERTY LOSS(Rs.)				Reasons of property loss
	Property loss	Kind of Property		Live-stock	Crops	House	Others		
		Live	Crop						
Deoli	23 (46.00)	19 (82.60)	2 (8.70)	2 (8.70)	53900 (69.19)	5000 (6.42)	19000 (24.39)	1. Heavy and scanty rainfall 2. Land slide 3. Diseased 4. Fodder shortage	
Falseema	19 (38.00)	11 (57.89)	6 (31.58)	2 (10.53)	65080 (62.68)	17350 (16.71)	21400 (20.61)		
Malgaon	16 (32.00)	16 (100.00)	-	-	54000 (100.00)	-	-		
Almora Distt.	58 (38.67)	46 (79.31)	8 (13.77)	4 (6.90)	124380 (66.47)	22350 (11.94)	40400 (21.59)		
Arakota	12 (24.00)	2 (16.67)	4 (33.33)	6 (50.00)	15000 (37.97)	6000 (15.19)	18500 (46.84)		
Manjud	20 (40.00)	10 (5.00)	6 (30.00)	4 (20.00)	38200 (56.74)	14320 (21.28)	14800 (21.98)		
Bada Sweeta	18 (36.00)	14 (79.78)	3 (16.67)	1 (5.55)	40000 (72.73)	7000 (12.72)	8000 (14.55)		
Tehri Garhwal	50 (33.33)	26 (52.00)	13 (26.00)	11 (22.00)	93200 (57.60)	27320 (16.88)	41300 (25.52)		
Hill region	108 (36.00)	72 (66.67)	21 (19.44)	15 (13.89)	217580 (62.35)	49670 (14.23)	81700 (23.42)		

1. Heavy and scanty rainfall
2. Land slide
3. Diseased
4. Fodder shortage

Almora District and 33. 33 per cent of the total households in Tehri Garhwal have undergone such losses. The village-wise data of the households reporting property losses indicate that the proportion of the total households belonging to all the villages in Almora district has been more than the proportion of such total households in the villages of Tehri Garhwal.

The three types of property losses are reported by the households suffering from these losses : losses of livestock, crops and houses. The same table indicates that in all the villages of the region, the livestock losses are major, as a large number of the households have suffered from such losses and they constitute a major part of the total property losses in value term in all the villages and also in the two districts taken separately or together. For instance, 79.31 per cent of the total households reporting property losses in Almora district incur 66.47 per cent of the total value of the property losses; 52 per cent of such households in Tehri Garhwal incur about 58 per cent of the total value of their property loss. In this way, in both districts taken together, 66.67 per cent of the total households reporting property losses have to lose 62.35 per cent of the total value of their property losses. A similar case is found in all the villages

of the Hill region. Next to the proportion of the households suffering from property losses and their relative share of other property losses are those households which have reported the occurrence of house and crop losses in the districts.

The reasons for the property losses that the households have to undergo during last ten years are heavy and scanty, land slide, rains, fodder shortage and diseases. They lost livestock primarily due to fodder shortage and diseases. The land slides caused damages to the houses during rainy season. Crop losses were primarily caused by scanty rainfall. In a way, all this implies that unfavourable natural and geo-physical conditions are the main causes for the property losses that the households have to incur in the hill areas.

Impact of Anti-poverty Programmes

In the sample villages, we have information about the implementation of two major rural development programmes (viz. Jawahar Rozgar Yojana and Loans for Self-employment) from the sample households. In addition to these two, we also have information about the old-age pension scheme which was adopted in 1986 or 1987. One of the households in Arakota village of Tehri Garhwal also reported some benefit under the land development scheme. Table 51 shows that the number of the total households benefited from the Jawahar Rozgar

Table 51
Impact of Anti-poverty Programmes in Hill
Region

District/Programme	Percentage of total household benefited	Annual benefits per household (Rs.)	Types of benefits
1. Jawahar Rozgar Yojana	38.00	2053	1. Employment and road construction
2. Loan for self-employment	10.00	5463	2. Business and assets creation like Buffalo, Goats etc.
3. Land Development	-	-	3. Availability of cultivable land
4. Old Age Pension	15.00	1432	4. Continuing since 1986-87
5. Total Almora	63.00	2478	
6. Jawahar Rozgar Yojana	33.00	2959	Same as 1.
7. Loan for self-employment	20.00	4017	Same as 2.
8. Land Development	0.67	30000	Same as 3.
9. Old Age Pension	14.00	5476	Same as 4.
10. Total Tehri Garhwal	66.33	4072	
11. Jawahar Rozgar Yojana	35.00	2472	Same as 1.
12. Loan for self-employment	15.00	4500	Same as 2.
13. Land Development	0.33	30000	Same as 3.
14. Old Age Pension	14.33	3442	Same as 4.
15. Total Hill Region	64.34	3157	

Yojana and Self-employment Loan Scheme constituted respectively 38 per cent and 10 per cent of the total households in Almora district, 33 per cent and 20 per cent of the total households in Tehri Garhwal, and 35 per cent and 15 per cent of the total households in both districts taken together, i.e. Hill region. Some 15 per cent of the total households in Almora district, and 14 per cent of the total households in Tehri Garhwal district were benefited from the Old Age Pension Scheme respectively. In this way, 14.33 per cent of the total households in the Hill region were benefited from the Scheme. In all 63 per cent of the total households in Almora district, 66.33 per cent of the total households in Tehri Garhwal and 64.34 per cent of the total households in the Hill region were benefited from all the programmes, inclusive of the Old Age Pension. The benefits from all the programmes per household in money terms during 1989-90 were Rs.2478 in Almora and Rs.4072 in Tehri Garhwal, and Rs.3157 in the Hill region. The amount of benefit per household from the Jawahar Rozgar Yojana varies from Rs.2959 in Tehri Garhwal district to Rs.2053 in Almora district. The amount of benefit per household from the Self-employment Loan Scheme varies from Rs.5463 in Almora district to Rs.4017 in Tehri Garhwal. The per household benefit from the Old Age Pension also varies from Rs.1432 in Almora district to Rs.5476 in Tehri Garhwal, if the first two

programmes are taken into consideration. Table 51 indicates that half of the rural labour households were actual beneficiaries in the Hill region and they received Rs. 2970 from these two programmes during 1989-90.

The generation of income from the Jawahar Rozgar Yojana was through employment of labour in road construction in the villages. Under the self-employment loan scheme, loans were given for the start of some household business and for the purchase of assets like buffalo and goats.

The purpose of the present study was not to examine the impact of the programmes in details and so the details about the employment and the utilisation of loans for asset formation were not taken into account. However, we have some qualitative information from the households in the sense of their response to the impact of the programmes on them. About 35 per cent of the total benefited households (with some variation in the two districts) in the Hill region reported to have 'no favourable impact' on them. Why they did not have favourable impact, remained to be investigated further. A study by Jafri and Nagarkoti⁸ based on a sample

8. Jafri, S.S.A. and Nagarkoti, D.S., 'Rural Development Programmes : Impact on Growth and Distribution in U.P. Hills' in Tiwari, R.T. (ed), Development and Change, Ashish Publishing House, New Delhi, 1988.

of 197 IRDP beneficiary households in 8 districts of U.P.'s Hill region shows that 64 per cent of them were not benefited from the programme there. In the districts like Almora and Tehri Garhwal, 78 per cent and 41 per cent of the total households belonging to these two respectively were not benefited from the programme but the benefited households experienced 2.3 per cent and 11 per cent income in their incomes in these two districts respectively.

An overall observation of the sample study indicates that the IRDP, however, did make much dent on poverty and a number of the benefited households reported to have been harassed and suffered from bribery in taking loans under the IRDP in these districts. The built-in methodological difficulties of its implementation and other institutional difficulties also affected the households in deriving the benefits in the villages. What all this implies is that there exist structural and institutional handicaps in actualising the benefits from the rural development programmes in order to improve their socio-economic lot.

III

CONCLUSION

The extent of poverty prevailing among the rural labour households is high in the Hill region. There are certain households which are not only poor but also destitute and extremely poor.

The rural labour households not only face natural hazards but also suffer from some specific disabilities. Their disabilities arise from the holding size of land they own and cultivate, from low crop yields, from the lack of productive assets, from onerous nature of indebtedness, from the dependence on natural sources of drinking water and the physical difficulties to fetch water for domestic consumption, at distant places from the sources of water and from the property losses they suffer due to geo-physical conditions and natural hazards therefrom. All these disabilities are structural. In the absence of proper scientific protection from the natural hazards, such structural disabilities are vicious and get deepened in the Hill areas.

CHAPTER VI

CONCLUSIONS AND SUGGESTIONS

The present study is based on an intensive field survey of 300 rural labour households selected evenly from the three villages in Almora district of the Kumaon Division and from the three villages in Tehri Garhwal district of the Garhwal Division. A sample of 50 households from each of the six villages was drawn on the basis of stratified random sampling.

The second chapter of the study deals with the socio-economic characteristics of the Hill region based on secondary data from the published official sources of the State Government. The main highlights of this chapter are that (a) the hill areas are over-whelmingly rural, with agricultural as the main source of occupation and livelihood; (b) the supply of land for cultivation is extremely limited; (c) the number of marginal and small holdings are preponderate; (d) farming is subsistence one and does not yield more than self-consumption; and (e) the level of development in the Hill region measured on a number of indicators does not present the region less developed than the other regions of the State, if a comparative regional analysis of development is made on the basis

of those development indicators. But such an analysis would mislead the concept of hill development.

The third chapter throws light on some of the basic socio-economic characteristics of the sample districts based on secondary data, the sample villages based on the data collected through the village schedules and the sample households on the field data. The socio-economic characteristics of the sample districts indicate that these districts are basically rural, with agricultural as the main source of occupation. This is also true in respect of the sample villages. The Scheduled Caste and Tribes population constitutes 21.93 per cent of the total population in Almora district and about 13 per cent of the total population in Tehri Garhwal. Agricultural Labourers constitute only 1.52 per cent of the total workers in Almora district and 0.29 per cent of the total workers in Tehri Garhwal. In the sample villages, there is also virtually non-existence of the agricultural labourers. Most of the workers are cultivators. The proportion of the total main workers in 'others' category is about 24 per cent in Almora district and about 14 per cent in Tehri Garhwal district.

In both districts, the supply of land available for cultivation is quite limited and the marginal and small

holding are preponderant in number. In the sample villages too, the households rarely own and operate more than 5 acres of holding size. The Scheduled Caste and Tribes hardly own and operate more than 2.5 acres of holding size. The level of agricultural and industrial developments shown on the basis of certain indicators shows that these two districts are agriculturally and industrially backward in the Hill region.

The socio-economic characteristics of the same households indicate that the labour participation ratio is 58 per cent in Almora district and 63 per cent in Tehri Garhwal; the male and female labour participation ratio is equal in both districts and the dependency ratio is 71 per cent in Almora district and 60 per cent in Tehri Garhwal. The caste composition of the households shows that higher (upper) castes generally dominate village-wise, district-wise and in the Hill region as a whole. The literacy rate is found not less than 48 per cent of the total population in these two districts. However, the male literacy rate is more than the female one. The households, by and large, own and operate marginal holdings and only a few of them possess more than 5 acres of land. The most striking and noteworthy finding of this chapter from the analysis of the sample households is that farming

is not the main source of dependence for a majority of them from the point of income generation. It is the non-agricultural labour which is the main source of income generation for more than 50 per cent of the total sample households in these two districts. Next to it are 'farming' and 'services'.

In the fourth chapter the patterns of employment, earnings and consumption relating to different categories of rural households are put forward. Some of the main findings are as follows: firstly, farming is the most important labour-absorbing (in terms of self-employment) activity, but not so from the point of view of income for the households for their dependence in the Hill region. Second, agriculture is not significant for nor viable for the creation of wage employment in the hill areas. Third, non-agricultural labour is the major source of income generation in the region. It implies that non-agricultural activities are the major dependable source of employment-cum-income generation. The service sector is the third most dependable source of employment and income for the households there. Fourth, agricultural and non-agricultural wages do not differ much from one another. Women workers are in a worse state, with a low wage rate and low earning jobs or activity. Fifth, the level of consumption expenditure shows that all

people are backward with low level of consumption. The caste-wise level of consumption expenditure shows that the Scheduled Castes and Tribes households are much more in disadvantageous position, considering the holding-size and land-sharing in the villages. The caste-wise pattern of consumption expenditure also bears a testimony to this fact. The Scheduled Caste and Tribe people do not spend on education and health as much as the higher and intermediate castes do. A major part of the households budget goes to consumption of food, non-food and clothing. However, proportion of household consumption expenditure on drinks and smoking (including hard drink like wine, a major part of this expenditure head) varying from 8 per cent to 10 per cent of the total expenditure, is alarming, considering the state of development and level of living in the hill areas. Finally, the level of per capita per day food consumption places all the people in poverty circle, if the standard norm of 616 grams of food-grain requirements with substitutes to provide 2400 calories intake is taken into consideration.

The fifth chapter dealing with the extent of poverty and disabilities of the labour households shows prevalence of a high incidence of poverty in the hill areas and the existence of a number of disabilities that they face there.

The extent of poverty is measured on the basis of expenditure and income criteria. The first has taken Rs.140 per capita monthly expenditure at 1988-89 prices (assuming 2400 calories per person/day intake for rural areas) for defining the poverty line. This also implies that less than Rs.4.66 per day per person earning at 1988-89 prices defines the poverty line. On the basis of these two measures, the extent of poverty is found high among the rural labour households in the hill areas. It may be, however, noted that minimum calorific requirement for the hill areas is worked out to be 3200 calories, considering the rigorous climate, physiographic and nature of work factors there, by 'A Study of Socio-economic Conditions of Hill Women' conducted by the Centre for Development Studies and Activities, Pune in 1983 indicates. In this case, the incidence of poverty could emerge much higher than what is found in this study. The findings of this chapter indicate, however, the existence of a high incidence of poverty among the rural households in the hill areas.

This chapter also shows that given geo-physical conditions, the rural households face a number of disabilities in the hill areas. Some of the disabilities discussed here

arise from the preponderance of marginal and small holdings, low yield potentials, nature-bound sources of irrigation, traditional crop culture, lack of productive assets, onerous nature of indebtedness, dependence on natural sources of water for domestic consumption and physical difficulties in fetching drinking water at distant places from the sources of water and property losses that they generally suffer due to unfavourable natural forces and conditions. The anti-poverty programmes could not make much felt impact on the households because the target-group approach that too defective one, hardly match with the specificity of the Hill region. It is so because the region has its own ecology-bound socio-cultural attributes and the target-group approach did not conceive such attributes, if adopted for implementation. Hence, the implementation of any rural development in hill areas divorced of their socio-cultural characteristics in given geo-physical conditions can hardly serve the desired purpose, except monetising the village economy without creating a strong productive commodity and assets base.

Briefly speaking, the main findings of the present study highlights the present socio-economic state of the rural labour households in the hill villages in terms of

output-income generating activities, employment-cum-income generating opportunities, the pattern and level of consumption expenditure and disabilities that they face on the way to satisfying the basic minimum needs in order to sustain their lives. In fact, these findings reflect both, the constraints and potentials of development which could be overcome and exploited in order to improve the socio-economic conditions of the rural poor in the hill areas.

The constraints of development primarily lie in the geophysical conditions of the region that limit all the efforts to develop the area and people; in the scarce supply of land for cultivation, in the marginal and small holding size of land that is preponderant in number; nature-bound sources of irrigation; in low crop yield; in lack of productive assets, onerous nature of indebtedness; the dependence of nature for drinking water; and occurrence of natural calamities that lead to losses in the property of the people.

The exploitation of the development potentials firstly rest in an appropriate development strategy to minimise the limitations imposed on the development efforts by the geophysical conditions of the hill areas; and then, in the efforts to develop production activities and to create employment opportunities in the context of local conditions and resources.

In order to minimise the limitations imposed on the development efforts by the geo-physical conditions, such a strategy of planning for land use should be evolved that could exploit the natural resources like land, water and vegetation without causing any damage to ecological balance in the hill areas. This necessitates the adoption of the following : watershed planning, microhydro projects and micro-projects to create small reservoirs from the small streams and Shrota for the supply and management of drinking water for the people and adoption of appropriate scientific and technological methods to improve the traditional method of crop culture in order to raise crop yield. All this should be based on the community approach and efforts and the State intervention should be limited to the provision of resources and technical knowledge and inputs required for development in the hill areas.

Some community land is also required for growing certain trees and grasses for animal grazing, fodder and wood for domestic consumption.

Given the geo-physical conditions, the State should encourage to develop the certain production activities on their own initiatives, as the State owns three-fourths of the land, such as medicinal herbs/plants processing

industries and other forest product-based industries in the remote hill areas. The expansion of these industries will expand the productive base of the hill economy and also create non-agricultural wage employment.

A clustered approach to develop traditional and cottage industries like woollen and cotton handlooms, hosiery, silk products, carpet etc. should be adopted in the hill areas. There is a lot of possibilities to develop horticulture and fruit processing industries in the Hill region. These industries will not only increase income potentials but also employment opportunities for the people in the hill areas. Development of all these activities requires appropriate infrastructures like road and marketing facilities. So far road development is concerned a proper care is needed in order to prevent the areas from the possible ecological damage and problems. A proper marketing structure is needed but should be based on the principle of cooperation in order to involve the actual producers and not the traders or intermediaries.

The strategy of planning for developing all the above industries should be such that the ecological balance and relations between the soil cover and the people are not disturbed and these industries are placed at their respective

central places that cluster specific identified villages of the region.

Animal husbandary is one of the major activities and assets for the people in the hill areas. There are enough potentials to develop dairying, piggery and poultry etc. in the hill villages. All these animal-based industrial activities should also be developed on the basis of cluster approach assuming cooperation as its inner core. The concept of cluster approach implies here identification of villages on the basis of the people's main activity, say, poultry and then the selection of a central village wherein the producers' marketing cooperative society functions. Such an approach provides integration between people and the villages through the process of activity development. What all this shows is that a scientific vision and approach is required to assess and utilise local resources, needs and wisdom and activities but based on cluster village unit of planning not on the household unit of planning for development. The cluster-village unit of planning should function by involving village community at the level of formal or semi-formal democratic institution like Gram Panchayat.

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